UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

Polaris Industries Inc., Plaintiff, v. CFMOTO Powersports, Inc., CFMOTO America, Inc., John T. O'Mara & Angela M. O'Mara, d/b/a Quad Central MotorSports, and Leo's Kawasaki Sales South, Inc., Defendants.	Case No. 10-cv-4362 (JNE/HB) **REPORT AND RECOMMENDATION**

Dennis C. Bremer, Alan G. Carlson, Samuel T. Lockner, and William F. Bullard, Carlson Caspers Vandenburgh Lindquist & Schuman PA, 225 South Sixth Street, Suite 4200, Minneapolis, MN 55402, for Plaintiff

Boris Parker and Nicholas M. Wenner, Parker & Wenner, 100 South Fifth Street, 2100 Fifth Street Towers, Minneapolis, MN 55402; Jeffrey D. Shewchuk, Shewchuk IP Services, LLC, 3356 Sherman Court, Suite 102, Eagan, MN 55121, for Defendants

HILDY BOWBEER, United States Magistrate Judge

I. Introduction

Polaris Industries Inc. brought this action against CFMOTO Powersports, Inc., CFMOTO America, Inc., John T. O'Mara & Angela M. O'Mara, d/b/a Quad Central MotorSports, and Leo's Kawasaki Sales South, Inc. alleging claims of patent infringement, federal unfair competition under the Lanham Act, deceptive trade practices under Minnesota Statute § 325D.44, unlawful trade practices under Minnesota Statute § 325D.09, and common law unfair competition. Defendants seek declaratory relief on

non-infringement, invalidity, and inequitable conduct grounds. The case is before the Court to construe disputed claim terms under *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). (*See* Order of Reference [Doc. No. 161].)

II. Background

This patent infringement action arises from Plaintiff's patents for a trail-compliant self-described all-terrain vehicle ("ATV") that allows riders to sit in side-by-side seats and drive on different types of terrain, while complying with maximum width requirements of recreational trails. (Pl.'s Opening Mem. at 3 [Doc. No. 167].) The patents-in-suit are United States Patent Nos. 7,819,220 ("the '220 patent"), 8,382,125 ("the '125 patent"), and 8,596,405 ("the '405 patent"). These patents issued from United States Patent Application No. 11/494,891 ("the '891 application"), with the '220 patent issuing first, and the '125 and '405 patents issuing as continuations of the '891 application. (Pl.'s Opening Mem. at 8-9.)

Plaintiff's patents seek to address issues that arose with prior ATVs. Prior ATVs had different seating configurations. For example, an earlier saddle-type seating arrangement required riders to straddle the seat and sit one behind the other, preventing the passenger from sharing the driver's viewpoint and riding experience. (*E.g.*, '220 patent, col. 1, ll. 17-25.) The patents also note that while the side-by-side seating arrangement had become more prevalent with ATVs, its use was unacceptable or impractical on recreational trails with maximum width requirements. (*E.g.*, '220 patent, col. 1, ll. 26-34.) Therefore, certain embodiments of the patented invention define a trail-compliant vehicle width. (*E.g.*, '220 patent, col. 1, ll. 44-45, 52-53.)

Plaintiff developed a line of side-by-side off-road vehicles, marketed under the RANGER® brand. (Third Am. Compl. ¶¶ 9-10 [Doc. No. 121].) Defendants, too, began distributing a line of side-by-side off-road vehicles, marketed as the ZFORCE 600 and ZFORCE 600EX. (*Id.* ¶ 20.)

In this litigation, Plaintiff accuses all Defendants of infringing the ’220 patent, federal unfair competition under the Lanham Act, deceptive trade practices under Minnesota Statute § 325D.44, unlawful trade practices under Minnesota Statute § 325D.09, and common law unfair competition. (*Id.* ¶¶ 18-46.) Plaintiff also accuses Defendants CFMOTO Powersports, Inc. and CFMOTO America, Inc., of infringing the ’125 and ’405 patents. (*Id.* ¶¶ 47-60.)

Defendants assert various affirmative defenses, including non-infringement, invalidity, and inequitable conduct, and seek declaratory relief on the same grounds. (Defs.’ Answer Third Am. Compl. & Am. Countercl. ¶¶ 19-96 [Doc. No. 172].) After Plaintiff filed this action, Defendants requested the United States Patent and Trademark Office (“USPTO”) to conduct an *inter partes* reexamination of the ’220 patent, which was denied. (Shewchuk Decl. Ex. 13 [Doc. No. 170-13].) In a separate proceeding, Arctic Cat, Inc. petitioned the USPTO to conduct an *inter partes* review of the ’405 patent, which was granted on February 13, 2015. (Shewchuk Decl. Exs. 28, 29 [Doc. No. 195-1, 195-2].)

III. Discussion

A. Claim Construction Principles

Patent claim construction is a matter of law. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015). In construing claims, courts first examine the intrinsic evidence, including the claim language, the specification, and the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Generally, claim terms receive "their ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). "[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms." *Id.* at 1314. "[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* at 1313. The specification may provide a special definition given to a claim term, or a disavowal of the claim scope by the inventor. *Id.* at 1316. Special definitions and disavowals "require a clear and explicit statement by the patentee." *Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362, 1367-68 (Fed. Cir. 2012). Additionally, courts are careful not to import limitations from the specification into the claims. *Phillips*, 415 F.3d at 1323.

Courts also consider the prosecution history of a patent, which provides evidence of how the USPTO and the inventor understood the patent. *Id.* at 1317. Although the prosecution history "often lacks the clarity of the specification and thus is less useful for

claim construction purposes," nonetheless it may still "inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

Courts may also consider extrinsic evidence, which is "evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Id.* at 1317-18. Among the types of extrinsic evidence, "the court has observed that dictionaries and treatises can be useful in claim construction." *Id.* at 1318. Courts may "rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." *Vitronics*, 90 F.3d at 1584 n.6. But in most situations, intrinsic evidence will resolve any ambiguity in a disputed term, rendering reliance on extrinsic evidence improper. *Id.* at 1583.

B. Claim Construction

Plaintiff alleges infringement of claims 1 and 3-14 of the '220 patent; claims 1-7, 9-14, 16-37, and 39-40 of the '125 patent; and claims 34 and 36-38 of the '405 patent. (Second Am. Joint Claim Construction Statement at 1 [Doc. No. 165].) Plaintiff argues that none of the disputed claim terms requires construction because each is readily understood, and Plaintiff proposes alternative constructions only if the Court finds construction necessary. (Pl.'s Opening Mem. at 11.)

Defendants, however, assert the need to construe the following terms: (1) "all-terrain vehicle," (2) "front frame portion, a mid frame portion and a rear frame portion,"

(3) "supported by the rear frame portion," (4) "front drive shaft" and "rear drive shaft," (5) "protective panel," (6) "positioned between the pair of laterally spaced-apart seating surfaces and the engine," (7) "extends under," (8) "partially extends over," (9) "completely rearward of the seating area," and (10) "extending between." (Second Am. Joint Claim Construction Statement App. [Doc. No. 165-1].) Defendants further ask the Court to determine whether the term "all-terrain vehicle," which appears in the preamble of each asserted claim, is a claim limitation. The Court turns to that issue first.

1. "all-terrain vehicle"

a. Whether the term as used in the preamble is a claim limitation

The term "all-terrain vehicle" appears in the preamble of each asserted claim. The parties dispute whether "all-terrain vehicle" should be read as a claim limitation. Plaintiff argues the term is limiting, citing references in the patents to "all-terrain vehicle" as well as the inventors' reliance on "all-terrain vehicle" during patent prosecution to distinguish prior art. (Pl.'s Opening Mem. at 15-17.)

Defendants respond that the term does not limit the claims because the limitations contained in the body of the claims fully define what is being claimed; and because the USPTO examiner, during prosecution of the patents, did not view "all-terrain vehicle" as limiting, or at a minimum, applied a broad construction. (Defs.' Opening Br. at 12-13 [Doc. No. 169].) Defendants also argue that Plaintiff did not rely on the preamble during prosecution to distinguish the claimed invention from the prior art. (Defs.' "All-Terrain Vehicle" Opening Br. at 4 [Doc. No. 194].)

The preamble is an introductory statement that precedes the body of the claim. In general, it is not limiting. *See Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002). There is no "litmus test" to define when a preamble limits the scope of a claim. *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1347 (Fed. Cir. 2002). The determination of whether to treat a preamble as a limitation is "resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim." *Id.* Generally, a preamble is limiting if it recites essential structure or steps, or is "necessary to give life, meaning, and vitality" to the claim. *Id.* "Clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art may indicate that the preamble is a claim limitation because the preamble is used to define the claimed invention." *Id.* A preamble is not limiting, however, if a patentee defines a structurally complete invention in the body of the claim, and the preamble merely states a purpose or intended use for the invention. *STX, LLC v. Brine, Inc.*, 211 F.3d 588, 590 (Fed. Cir. 2000).

In *In re Cruciferous*, the Federal Circuit found the preamble term "rich in glucosinolates" to be limiting, because the specification and prosecution history showed that this phrase helped to define the claimed invention. 301 F.3d at 1347. The court relied on certain language in the specification—*i.e.*, "this invention relates to the production and consumption of foods which are rich in cancer chemoprotective compounds," and a stated object of the invention was "to provide food products and food additives that are rich in cancer chemoprotective compounds"—to conclude the inventors believed their invention to make food products rich in chemoprotective compounds, "or, in other words, food products

'rich in glucosinolates.'" *Id.* The court also noted the patentee's statements during reexamination of the '895 patent, which distinguished the cited prior art because it did not "explicitly teach a method of preparing a food product comprising cruciferous sprouts that are rich in glucosinolates or contain high levels of Phase 2 inducer activity." *Id.* at 1347-48. From this language, the court found that the patentee clearly relied on the term in the preamble to argue against anticipation before the USPTO. *Id.* at 1348.

Similarly, in the instant case, there are multiple references in the specification of the '220, '125, and '405 patents to the term "all terrain vehicle." The Abstract of each patent states that the invention relates to "side-by-side all-terrain vehicles having at least a pair of laterally spaced apart seating surfaces," and relates to "trail compliant side-by-side all-terrain vehicles." The Background of the Invention in each patent describes the increasing recreational interest in all-terrain vehicles and specialty all-terrain vehicles, "such as those used for trail riding, racing, and cargo hauling," and the increasing number of all-terrain vehicle riders that "are enjoying recreational trail riding through public lands, including state parks and national forests." The Summary of the Invention for each patent sets forth various illustrative embodiments for an all-terrain vehicle. The Brief Description of the Drawings in each patent refers to various figures depicting a "side-by-side ATV."

Defendants argue the following statement from the Detailed Description of Embodiments of the Invention section in each patent shows that Plaintiff did not intend to limit its invention to all-terrain vehicles: "[W]hile the following description refers primarily to an ATV, certain features described herein may be applied to other

applications such as UVs [utility vehicles], snowmobiles, motorcycles, mopeds, etc." (Defs.' Resp. Br. at 3 [Doc. No. 173].) Plaintiff counters, emphasizing the term "other" from that sentence. Plaintiff argues this term shows it intended UVs, snowmobiles, motorcycles, mopeds, etc. to be different from ATVs. (Pl.'s Resp. Mem. at 4 [Doc. No. 177].) The Court finds that any ambiguity created by that sentence in the detailed description is outweighed by the numerous references to "all-terrain vehicle" in the specification. Indeed, the preamble for each independent claim in all three asserted patents recites an "all-terrain vehicle." There are no preambles of independent claims reciting broader terms such as "machine" or even "vehicle." On the whole, the Court finds the repeated reference to an all-terrain vehicle in the specification of the '220, '125, and '405 patents is reflective of the inventors' intent that the term "all-terrain vehicle" is a claim limitation.

Moreover, Plaintiff appears to have relied on the limiting context of the "all-terrain vehicle" during prosecution to distinguish the claimed invention from prior art. Notably, while prosecuting the application that resulted in the issuance of the '125 patent, Plaintiff argued over an obviousness rejection based on a combination of a modified Volkswagen (the Vittone prior art reference) and a golf-cart type vehicle with a front storage area (the Peters prior art reference), stating:

> No one skilled in the art of the manufacture of power sports vehicles would look to Vittone's modified Volkswagen as a basis to design an *all terrain vehicle* and combine with it, the storage area of Peters.

(Bullard Decl. Ex. E at A0844 [Doc. No. 168-6] (emphasis added).) Similarly, Plaintiff stated in response to another obviousness rejection that "[o]ne of skill in the art would not

be led to incur the significant costs to lessen the wheel width (and overall width) and thereby decrease the stability of the vehicle that is *designed for off-road*." (*Id.* at A1019 (emphasis added).) Plaintiff's reliance during prosecution on the nature of its invention as an "all-terrain vehicle," by contrast with other types of on- or off-road vehicles, to distinguish prior art, further supports the Court's conclusion that the use of the term in the preamble of the asserted claims acts as a claim limitation.

b. Construction of "all-terrain vehicle"

Neither party addressed in their original *Markman* submissions the question of how the term "all-terrain vehicle" should be construed. Plaintiff urged the plain and ordinary meaning of this term should control, and no further construction was necessary. (Pl.'s Resp. Mem. at 9.) Defendants did not initially propose a construction of their own, but argued that if the Court finds (as it has) that the term does limit the claims, the plain and ordinary meaning would not suffice. (Defs.' Resp. Br. at 6.) After the *Markman* hearing, the parties provided, at the Court's request, supplemental briefing on construing the term "all terrain vehicle."

In its supplemental submission, Plaintiff once again argues for the "plain and ordinary meaning," but proposes the following construction if the Court concludes any is needed:

> A vehicle capable of driving over rough terrain, unleveled ground, steep inclines, deep-rutted roads, marshland, sand, rocks, fallen logs, mud, snow, ice, and through water.

(Pl.'s Opening Supp. Mem. at 3 [Doc. No. 191].) Plaintiff argues this interpretation is most consistent with how the term is used in the specification. Plaintiff also points to extrinsic

evidence, including the fourth edition of *Webster's New World College Dictionary* (defining an "ATV" as a small vehicle "for traveling over rough ground, snow, and ice, and through shallow water"), and various prior art references of record such as United States Patent No. 6,799,781 ("[a]ll terrain vehicles (ATV's [sic]) are designed to traverse relatively rough terrain"); United States Patent No. 6,467,787 ("ATV is typically a motor-driven, four-wheeled vehicle adapted for maneuvering over rough, muddy or sandy terrain"); and United States Patent No. 4,072,203 ("an increasing demand has arisen for vehicles able to travel over all types of terrain including hard rough terrain, steep inclines, over snow, marshland, and other and similar types of travel surfaces"). (Pl.'s Opening Supp. Mem. at 8.) Finally, Plaintiff submits a declaration from its expert, Dr. John J. Moskwa, opining that persons of ordinary skill in the art would understand this term in the context of the claims and specification in a manner consistent with Plaintiff's proffered construction. (Moskwa Suppl. Decl. [Doc. No. 193].)

Defendants challenge Plaintiff's reliance on the plain and ordinary meaning, arguing the vehicles described in the patent, including the preferred embodiments, are not "all-terrain vehicles" as that term was commonly understood in 2006, when the original patent application was filed. (Defs.' Opening Br. at 9.) Defendants cite, by way of example, a proposed rule published by the Consumer Product Safety Commission ("CPSC") in 2006 that describes an "ATV" as

> a motorized vehicle with three or four broad, low pressure tires (less than 10 pounds per square inch), a seat designed to be straddled by the operator, handlebars for steering, and it is designed for off-road use. Most ATVs are designed for use by only one person. However, some companies have developed ATVs intended for use by the operator and one passenger.

16 C.F.R. Parts 1307, 1410, 1500 and 1515 Standards for All Terrain Vehicles and Ban of Three-Wheeled All Terrain Vehicles, Proposed Rule, published in 71 Fed. Reg. 154 (Aug. 10, 2006). (Shewchuk Decl. Ex. 7 at 5-6 [Doc. No. 170-7].)

Defendants therefore propose the following construction for the term "all terrain vehicle" as used in the asserted patents:

> a four wheel drive motor vehicle having at least two front wheels coupled to a front suspension and at least two rear wheels coupled to a rear suspension supporting a frame, with an engine supported on the frame for driving the front and rear wheels.

(Defs.' "All-Terrain Vehicle" Opening Br. at 4.)

The Court finds a construction of the term "all-terrain vehicle" is needed. While no one argues the CPSC definition is dispositive on the meaning of "all-terrain vehicle" as used in the patent – indeed, it fundamentally differs in significant respects from the vehicle with side-by-side bucket seats and steering wheel disclosed in the patent – the CPSC definition highlights the disparate meanings that could be ascribed to the term at the time.[1] Moreover, even if a person of ordinary skill in the art would understand what is meant by the term in this context, the Court may also consider the jury's need for clarity in applying the meaning

[1] Contrast the CPSC definition with, for example, the types of vehicles the examiner purportedly refers to as "all-terrain vehicles" at one time or another during the prosecution of the patents-in-suit. (*See* Defs.' "All Terrain Vehicle" Claim Construction Opening Br. at 4-7 (citing, *inter alia*, power train for small recreational vehicle per United States Patent Application Publication No. 2005/0173180 A1 ("Hypes reference"); four-wheel vehicle per United States Patent No. 5,251,713 ("Enokimoto reference"); off-road vehicle with wheel suspension per United States Patent No. 7,510,199 ("Nash reference"); composite body for a golf car and utility vehicle per United States Patent Application No. 2006/0180383 ("Bataille reference"); truck per United States Patent No. D511,317 S ("Tanaka reference").))

to the evidence before it. *See Control Res., Inc. v. Delta Elecs., Inc.*, 133 F. Supp. 2d 121, 127 (D. Mass. 2001) ("[C]laim construction must result in a phraseology that can be taught to a jury of lay people. It is not enough simply to construe the claims [solely for] one skilled in the art. The claims must be translated into plain English so that a jury will understand."). Accordingly, the Court concludes that referring only to the "plain and ordinary meaning" as it would have been understood by a person of ordinary skill in the art in 2006 does not provide sufficient guidance in the context of this patent.

That said, the Court does not find Defendants' proposed construction persuasive. First, it essentially reads out the "all-terrain" attribute of the term, an attribute that is repeatedly referred to in the specification as integral to the use, purpose and advantages of the invention. For example, the specification refers to the patented vehicle's capacity to drive "over a variety of terrains," its use "for trail riding, racing, and cargo hauling," and the enabling of "riders" to "enjoy[ ] recreational trail riding through public lands including state parks and national forests." (*See* '220 patent, col. 1, ll. 11-17, 26-28.) The specification also notes that the all-terrain vehicle would encounter "rough terrain" and be "vigorous[ly] driv[en]." (*See* '220 patent, col. 4, ll. 55, 64, col. 5, ll. 12, col. 8, ll. 25-26.)[2] These attributes are nowhere to be found in Defendants' proposed construction. While Defendants argue that a reference to intended use is inappropriate for claim construction (Defs.' ATV Claim Construction Resp. Br. at 4-5 [Doc. No. 198]), the Federal

[2] The specification also suggests, however, that the ability to be driven over a variety of off-road terrains is not all there is to defining "all-terrain vehicle." For example, it appears to distinguish between "all-terrain vehicles" and "utility vehicles" ("UVs"), yet notes that both are "used to carry one or two passengers and a small amount of cargo over a variety of terrains." ('220 patent, col. 1, ll. 11-13.)

Circuit has noted that "[a] preamble may provide context for claim construction, particularly, where as here, that preamble's statement of intended use forms the basis for distinguishing the prior art in the patent's prosecution history." *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1362 (Fed. Cir. 2004).

Second, Defendants' proposed construction is not supported by the claim language. On one hand, it is redundant of limitations already in the body of the claims (*e.g.*, Claim 1 of the '220 patent), rendering the redundant language superfluous. Generally speaking, all elements of a claim should be construed to give each meaning. *See Innova/Pure Water, Inc. v. Safari Water Filtration Sys*., 381 F.3d 1111, 1119 (Fed. Cir. 2004) ("While not an absolute rule, all claim terms are presumed to have meaning in a claim."). Yet, at the same time, their construction, which calls for the rear suspension to *support* the frame, is at odds with another part of the claim, which calls for the rear suspension to *be supported by* the frame. (*E.g.*, '220 patent, col. 11, ll. 19.).

Moreover, nothing in the prosecution history cited by Defendants compels the construction they proffer. For example, Defendants point to statements by the examiner during the prosecution of the '125 patent such as: "Casucci, Lancia Delta S4 discloses an all-terrain vehicle (four-wheel drive and independent suspensions)." (Shewchuk Decl. Ex. 5 at 38, 41 [Doc. No. 170-5].) It is true that the prosecution history can inform the meaning of claim language by showing how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution. *Phillips*, 415 F.3d at 1317. But Defendants' citations to the prosecution history reflect, at most, the examiner's, not the patentee's, characterization of what is depicted in certain prior art references. As the

Federal Circuit has noted, "[p]rosecution history . . . cannot be used to limit the scope of a claim unless the applicant took a position before the PTO." *3M Innovative Props. Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1373-74 (Fed. Cir. 2003). Further, it is not at all clear that the examiner intended by the quoted language to define "all-terrain vehicle" by the presence of "four-wheel drive and independent suspensions" so much as to flag certain features of the particular vehicle disclosed in the reference.[3]

Similarly, the examiner's reference to other prior art vehicles as "all-terrain vehicles" does not necessarily mean the Court must construe the term in such a way as to cover all of them. First, the examiner is bound to give the "broadest reasonable construction" to any given term in the context of her work, while the Court must ascribe to the term its "ordinary and customary meaning." *Phillips*, 415 F.3d at 1312, 1316; *see also Facebook, Inc. v. Pragmatus AV, LLC*, Nos. 2013-1350, 2013-1351, 2014 WL 4454956, at *4 (Fed. Cir. Sept. 11, 2014) (non-precedential). Moreover, that the patentee did not distinguish each prior art reference cited during prosecution as to whether it was or was not an all-terrain vehicle does not mean the patentee accepted it as such. *Superguide Corp. v. DirecTV Enters.*, 358 F.3d 870, 881 (Fed. Cir. 2004) ("We can draw no inference from what [the patentee] did not argue.").

However, the Court finds no need to itemize the off-road conditions the all terrain vehicle must be capable of traversing. The Court concludes that the following construction

[3] Similarly, the *inter partes* order in *Arctic Cat, Inc. v. Polaris Industries, Inc.*, cited by Defendants for the examiner's statement that "Hickey relates to a wheeled, high speed, cross-country, rough terrain vehicle," (Shewchuk Decl. Ex. 29 at 8 [Doc. No. 195-2]), not only would not speak to the inventor's understanding of the invention, but also does not particularly support either party's construction.

of "all-terrain vehicle" is consistent with how a person of ordinary skill in the art would understand the term in the context of the claims and the specification, and therefore recommends the term "all-terrain vehicle" be construed as:

> a vehicle, primarily for off-road use, that is capable of being driven over a variety of off-road surfaces, inclines, and rough terrains

2. "front frame portion, a mid frame portion and a rear frame portion"

Plaintiff argues that these terms do not require construction, but if construction is necessary, the following should govern:

> Three portions of the frame, the mid frame portion supporting a seating area, the front frame portion being in front of the mid frame portion, and the rear frame portion being behind the mid frame portion.

(Pl.'s Opening Mem. at 20.) At the *Markman* hearing, Plaintiff argued the frame portions simply describe where on the vehicle certain components reside, relative to each other, and the term does not require construction. For the construction it proposes, Plaintiff focuses on the mid-frame portion and the seating area as the key to understanding the various frame portions. (*Id.* at 33.)

Meanwhile, Defendants urge the following construction:

> The frame is made up of relatively slender pieces called "rails," "members" and "tubes." The front frame portion are the rails, members and/or tubes between the front wheels, in front of the front dashboard, and further forward. The rear frame portion are the rails, members and/or tubes between the rear wheels and further rearward. The mid frame portion are the rails, members and/or tubes rearward of the front wheels and forward of the rear wheels, including the rails, members and/or tubes which support the seating area.

(Defs.' Opening Br. at 11.) Defendants question: (1) whether the word "frame" refers to a type or shape of component, or instead refers to any part of the vehicle that provides support, and (2) whether the words "front," "mid," and "rear," when referring to "frame portions," have an understood locational meaning on the vehicle, or have delineations that can be arbitrarily drawn. (*Id.* at 11-17.)

The Court looks first to the claim language. The term "front frame portion, a mid frame portion and a rear frame portion" appear in, for example, claim 1 of the '220 patent:

> 1. An all-terrain vehicle including:
>
> a frame, comprising *a front frame portion, a mid frame portion and a rear frame portion*;
> a front suspension supported by the *front frame portion*;
> at least two front wheels coupled to the front suspension;
> a front differential supported by the *front frame portion* and drivingly coupled to the front wheels;
> a seating area supported by the *mid frame portion*, comprising side by side bucket seats having a seat back and a seat bottom;
> an engine supported by the *rear frame portion*, the engine positioned rearwardly of the seating area, and each seat bottom has a seating surface with a low point of the seating surface being below a top of the engine, the spaced-apart seating surfaces including a driver seating surface and a passenger seating surface;
> a transmission coupled to the engine;
> a rear suspension supported by the *rear frame portion*;
> at least two rear wheels coupled to the rear suspension;
> a rear differential supported by the *rear frame portion* and drivingly coupled to the rear wheels;
> a front drive shaft extending between the transmission and the front differential for coupling the transmission to the front wheels;
> a rear drive shaft extending between the transmission and the rear differential for coupling the transmission to the rear wheels;
> a protective panel positioned between the pair of laterally spaced-apart seating surfaces and the engine wherein the front driveshaft extends under the protective panel; and
> a fuel tank being positioned below one of the seating surfaces

('220 patent, col. 11, ll. 2-33 (emphasis added).)

The claim language does not support Defendants' construction. *See Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 990 (Fed. Cir. 1999) ("[T]here must be a textual reference in the actual language of the claim with which to associate a proffered claim construction."). Defendants' proposed language of "rails" and "tubes" does not appear in the claims, and the same is true of "relatively slender." And one finds the term "members" only in certain dependent claims of the asserted patents. (*See, e.g.*, '220 patent, col. 12, ll. 6-9.) Furthermore, nothing in the claim language requires the front and rear frame portions to reside between the wheels, or the front frame portion to be in front of the front dashboard.

Nor does the specification of the patents-in-suit support Defendants' construction. True, the language of "rails," "members," and "tubes" can be found in the specification, which states:

> Referring now to FIG. 14, one illustrative embodiment of frame **15** of a side-by-side ATV such as ATV **10** shown in FIG 1 is shown. Frame **15** includes inner rails **72**, front crossmember **71**, mid crossmember **73**, and rear crossmember **77**. Frame **15** also includes outer tubes **70** that define the outermost width of frame **15**.

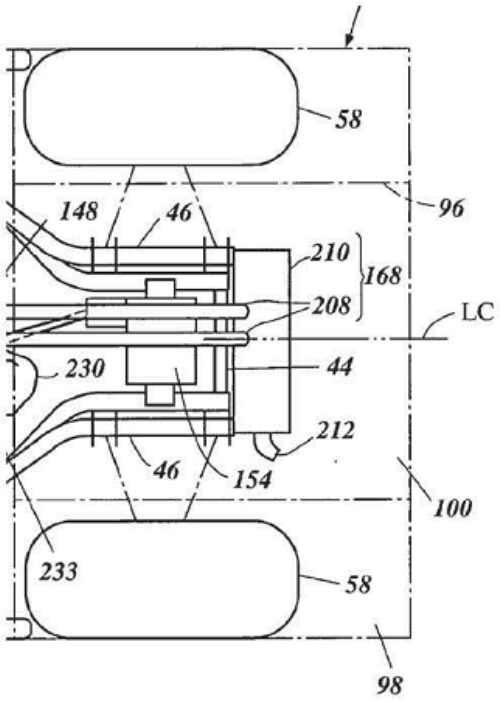
('220 patent, col. 5, ll. 59-64.) But the proposed language arises in the context of an exemplar embodiment. Courts will not import a limitation from the specification into the claims. *Phillips*, 415 F.3d at 1320; *see Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004) ("[I]t is improper to read limitations from a preferred embodiment described in the specification . . . into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited."). Although Plaintiff's counsel

acknowledged at oral argument that the term "frame" in the context of the patents-in-suit does not contemplate a "unibody" construction, there is no clear indication that Plaintiff intended to limit the components of the frame to "rails," "members," and "tubes," and the Court finds no basis to recommend that such a limitation be imported from the specification.

Next, the Court considers the prosecution history. Defendants argue that during prosecution, Plaintiff adopted arbitrary delineations between the frame portions that run contrary to Plaintiff's current position. (Defs.' Opening Br. at 15.) For example, Defendants quote Plaintiff's Response to Office Action during the prosecution of the '405 patent, in which Plaintiff, responding to the examiner's rejection over the Kato reference,[4] referred to the "rear portion" of the Kato vehicle:

> In the "Response to Arguments" section, the Office Action states that rear frame portion 42, 44, 46 supports the engine unit as shown in Fig. 2. The Office Action further states "The engine unit lies across the rear cross member 44." The rear portion of Fig. 2 of Kato is reproduced below.

[4] (United States Patent Application Publication No. US 2004/0195034 A1, Shewchuk Decl. Ex. 10 [Doc. No. 170-10].)



(*Id.* at 15-16; Shewchuk Decl. Ex. 6 at 41 [Doc. No. 170-6].) Defendants contend this argument by Plaintiff necessarily drew firm lines between the mid and rear frame portions of the patented invention, and assigned the "rear portion" to that part of the vehicle frame between the rear wheels and rearward.

But Plaintiff also stated:

> Regardless of what portion of Kato is cited as the mid frame portion and what portion of Kato is cited as the rear frame portion, the claim recites frame portions that require **the portion supporting the engine to be rearward of the portion supporting the seat**. Kato clearly shows a vertically aligned seat and engine, see Fig. 3, reproduced below. The portion of the frame supporting the engine of Kato is not shown to be rearward of the portion supporting the seat of Kato.

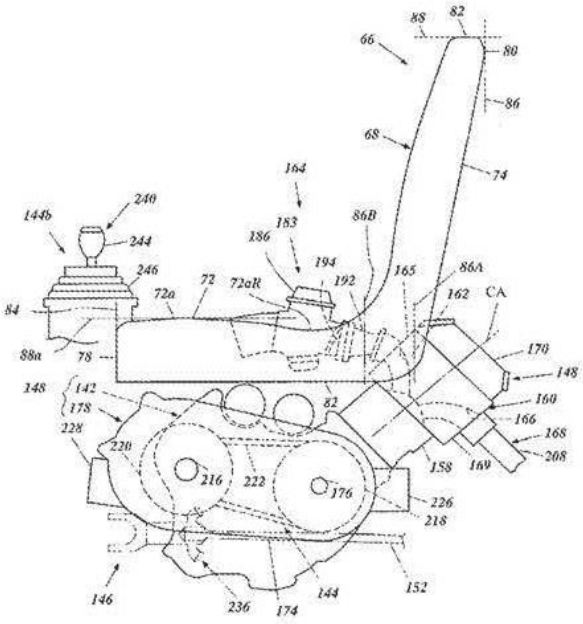


Figure 3

(Shewchuk Decl. Ex. 6 at 40 [Doc. No. 170-6]) (emphasis in original). The language of "[r]egardless of what portion of Kato is cited as the mid frame portion and what portion of Kato is cited as the rear frame portion," shows that Plaintiff was not attempting to delineate the mid and rear frame portions of the Kato reference with reference to the wheels. Rather, Plaintiff's statement vis à vis Figure 3 of Kato indicates that Plaintiff's primary objective was to distinguish Kato on the basis of where the portion of the frame supporting the engine was relative to the portion supporting the seat.

Defendants similarly argue that Plaintiff's characterization of the Hickey reference[5] in response to a petition for *inter partes* review of the '405 patent in *Arctic Cat, Inc. v. Polaris Industries, Inc.*, Case IPR 2014-01428, necessarily requires a clear demarcation between the mid and rear frame portions of the vehicle. (Defs.' Claim Construction Resp. Br. at 8.) The argument Defendants point to, however, does not

[5] (United States Patent No. 3,709,314, Shewchuk Decl. Ex. 27 [Doc. No. 174-4].)

establish such clear lines. It only notes that because the Hickey reference "does not show any seats, much less any seating area," it is impossible to tell what is part of the mid frame portion and what is part of the rear frame portion. (Shewchuk Decl. Ex. 25 at 16 [Doc. No. 174-2].) Again, nothing about the argument is inconsistent with Plaintiff's position that the relative locations of the portions are adequately identified by the terms "front," "mid," and "rear," and further anchored by the position of the seating area such that additional delineation by reference to other components of the frame is not necessary and not supported by the claim language, the specification, or the prosecution history.

Moreover, Defendants' construction, which sets the forwardmost boundary of the rear frame portion at the rear wheels, would read out the preferred embodiment from, for example, Claim 34 of the '405 patent. That claim recites the engine is supported by the rear frame portion, and the specification, describing the preferred embodiment, states the engine of the preferred embodiment is supported by the "portion of the frame 15 between mid crossmember 73 and rear crossmember 77." ('405 patent, col. 5, l. 67 – col. 6, l. 2, and Figs. 9 and 14.) Thus, in the preferred embodiment, the engine is supported by a portion of the frame that is forward of the rear wheels and rear crossmember, but rearward of the seating area. Defendants' construction would read it out, however, because the frame member supporting the engine is forward of the rear wheels. A proposed construction that reads out the preferred embodiment is "rarely, if ever, correct." *Vitronics*, 90 F.3d at 1583.

Next, Defendants argue that in the absence of a clear delineation among the front, mid, and rear portions, the patent claims become a "nose of wax,"[6] and the boundaries between frame portions could be gerrymandered from case to case to make virtually any vehicle configuration meet that claim limitation. But Plaintiff has been consistent both in prosecution and in this litigation in identifying the seating area as the reference point for the mid frame portion, and the Court is not persuaded that the positions of the "front" and "rear" frame portions relative to the mid frame portion are so malleable as to permit improper "twisting" of the term.

Relatedly, Defendants argue that if the rear frame portion is defined merely as that portion of the frame behind the portion supporting the seats, then the subsequent claim limitations "engine is supported by the rear frame portion" and "engine is positioned rearwardly of the seating area" are synonymous with each other, because so long as the engine is positioned rearward of the seating area, it must be supported by the rear frame portion. This, Defendants contend, would effectively read one of the limitations out of the claim, violating the principle of claim interpretation that each limitation should be given meaning and not be construed as superfluous. *Merck & Co., Inc. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."). This

[6] The phrase comes from *White v. Dunbar*, 7 S.Ct. 72, 74 (1886), in which the Supreme Court noted that "[s]ome persons seem to suppose that a claim in a patent is like a nose of wax, which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express." The Federal Circuit has noted that a patent should not, like said nose, be "twisted one way to avoid anticipation and another to find infringement." *See Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001).

argument fails too, as one limitation deals with the means of support of the engine – *i.e.*, supported by the rear frame portion – and the other addresses the location – *i.e.*, rearward of the seating area.

Plaintiff's construction finds support in the claim language and in the specification, which identify three portions of the frame ("front," "mid," and "rear"), and "a seating area supported by the mid frame portion." Nonetheless, the Court does not believe construction is necessary. A jury is capable of identifying each component, associating it with a portion of the frame, and understanding the spatial positioning of what is front, mid, and rear. Thus, the Court recommends that the term "front frame portion, a mid frame portion and a rear frame portion" not be construed.

3. "supported by the rear frame portion"

The term "supported by the rear frame portion" appears in several claims of the '220, '125, and '405 patents. Claim 1 of the '220 patent, for example, reads:

> 1. An all-terrain vehicle including:
>
> a frame, comprising a front frame portion, a mid frame portion and a rear frame portion;
> a front suspension supported by the front frame portion;
> at least two front wheels coupled to the front suspension;
> a front differential supported by the front frame portion and drivingly coupled to the front wheels;
> a seating area supported by the mid frame portion, comprising side by side bucket seats having a seat back and a seat bottom;
> an engine *supported by the rear frame portion*, the engine positioned rearwardly of the seating area, and each seat bottom has a seating surface with a low point of the seating surface being below a top of the engine, the spaced-apart seating surfaces including a driver seating surface and a passenger seating surface;
> a transmission coupled to the engine;
> a rear suspension *supported by the rear frame* portion;

at least two rear wheels coupled to the rear suspension;
a rear differential *supported by the rear frame portion* and drivingly coupled to the rear wheels;
a front drive shaft extending between the transmission and the front differential for coupling the transmission to the front wheels;
a rear drive shaft extending between the transmission and the rear differential for coupling the transmission to the rear wheels;
a protective panel positioned between the pair of laterally spaced-apart seating surfaces and the engine wherein the front driveshaft extends under the protective panel; and
a fuel tank being positioned below one of the seating surfaces.

('220 patent, col. 11, ll. 2-33 (emphasis added).)

Claim 1 of the '125 patent reads:

1. An all-terrain vehicle, comprising:
a frame, comprising a front frame portion, a mid frame portion and a rear frame portion;
a front suspension supported by the front frame portion;
at least two front wheels coupled to the front suspension;
a front torsion bar supported by the front frame and coupled to the front suspension;
a front differential supported by the front frame portion and drivingly coupled to the front wheels;
side by side seats, having a seat back and a seat bottom, the seat bottom having a top seating surface and a bottom mounting surface, the side by side seats further comprising a driver seating surface and a passenger seating surface;
a rear suspension *supported by the rear frame portion*;
at least two rear wheels coupled to the rear suspension;
a rear torsion bar *supported by the rear frame portion* and coupled to the rear suspension;
a rear differential *supported by the rear frame portion* and drivingly coupled to the rear wheels;
an engine supported by the frame, the engine comprising at least one cylinder having a cylinder head, said at least one cylinder being positioned rearwardly of the seating area and the top of the cylinder head of said at least one cylinder being positioned higher than the seat bottom mounting surface, and with the at least one cylinder head positioned forwardly of the rear differential;

a transmission coupled to the engine;
a front drive shaft extending between the transmission and the front differential for coupling the transmission to the front wheels;
a rear drive shaft extending between the transmission and the rear differential for coupling the transmission to the rear wheels;
a fuel tank positioned below the one of the passenger seating surface and driver seating surface; and
the overall vehicle width is less than 54 inches.

('125 patent, col. 11, ll. 14-50 (emphasis added).)

Claim 1 of the '405 patent states:

1. An all-terrain vehicle including:
a frame, comprising a front frame portion, a mid frame portion and a rear frame portion;
a front suspension supported by the front frame portion;
at least two front wheels coupled to the front suspension;
a front axle assembly supported by the front frame portion and drivingly coupled to the front wheels;
a seating area supported by the mid frame portion, comprising side by side seats;
an engine *supported by the rear frame portion*, the engine positioned rearwardly of the seating area;
a transmission coupled to and extending rearwardly of the engine;
a rear suspension *supported by the rear frame portion*;
at least two rear wheels coupled to the rear suspension;
a rear axle assembly *supported by the rear frame portion* and drivingly coupled to the rear wheels;
a front drive shaft extending between the transmission and the front axle assembly for coupling the transmission to the front wheels; and
a rear drive shaft extending between the transmission and the rear axle assembly for coupling the transmission to the rear wheels.

('405 patent, col. 11, ll. 2-25.)

Plaintiff argues that no construction is necessary for this term. (Pl.'s Opening Mem. at 18.) Alternatively, should construction be required, Plaintiff proposes: "All or part of the [engine weight (for claims reciting "engine supported by the rear frame portion") or rear

suspension (for claims reciting rear suspension supported by the rear frame portion")] being carried by or coupled to the rear frame portion."[7] (*Id.*)

Defendants argue that Plaintiff's construction reads the limitation out of the claim, particularly with regard to the claim limitation concerning the support of the engine, since the rear wheels are coupled to the rear frame portion, and the weight of the vehicle is borne on the four wheels. Thus, they posit, the weight of *every* component on the vehicle, regardless of where it is positioned, would be "supported" to a greater or lesser extent by the rear frame portion. Defendants do not argue that the term requires *all* of the supports for the engine, rear differential, or rear suspension respectively to be directly connected to the rear frame portion, but contend some direct connection is required or the limitation would be meaningless. Accordingly, Defendants propose: "The component has a support directly connected to the rails, members and/or tubes of the rear frame." (Defs.' Opening Br. at 18.) As the Court has already rejected Defendants' proposal to construe the rear frame portion (or any other frame portion) to require "rails, members and/or tubes," the dispute to be addressed here is whether the term "supported by" as used in these limitations requires at least one direct connection between the component and the rear frame portion, and if so, whether that connection must be in the form of an additional component, *i.e.*, a "support," interposed between the engine, rear differential, or rear suspension, and the rear frame.

Looking first to the claim language, the Court notes that although Defendants' proposed phrase "connected to" does not appear, the term "coupled to" does, and the claims

[7] Presumably Plaintiff proposes for the term concerning support of the rear differential a similar construction to that proposed for the rear suspension.

appear to draw a distinction between "coupled to" and "supported by." Claim 1 of the '220 patent teaches front wheels "coupled to" the front suspension, and a rear differential "coupled to" the rear wheels, but does not use "coupled" to describe the relationship between the engine, the rear differential, or the rear suspension, on the one hand, and the rear frame portion, on the other. ('220 patent, col. 11, ll. 2-33.) Typically, "when an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms." *Innova/Pure Water*, 381 F.3d at 1119-20.

Similarly, the specification seems to distinguish "coupled to" and "supported by" in describing the relationship between components. The words "coupled to" appear in the Summary of the Invention (*e.g.*, "a pair of rear wheels are operably coupled to the frame"), the Brief Description of the Drawings (*e.g.*, "FIG. 13 is a cross-sectional view similar to FIG. 12 with the hood coupled to the front panel"), and the Detailed Description of Embodiments of the Invention (*e.g.*, "Lower seating surfaces 20 are coupled to base 41 of ATV 10," "Rear assembly 92 is coupled to upper frame rails 90 and cross-member 77," "Referring to FIGS. 14 and 15 . . . Outer tubes 70 are coupled to inner rails 72 by brackets 69"). The use of the term in those contexts clearly describes a connection between two components, sometimes direct and other times indirect, but the plain meaning of the term "coupled" and the contexts in which it is used do not always imply that one component is "supporting" the other. The specification also uses the term "supported by" in the Summary of the Invention (*e.g.*, "an engine supported by the frame, a transmission supported by the frame"), and the Detailed Description of Embodiments of

the Invention (*e.g.*, "Referring now to FIG. 9 . . . Fuel tank 62 is supported by frame 15," "Referring now to FIGS 22-24 . . . Upper brackets 211 are supported by front tubes 204 and braces 209, while lower brackets 213 are supported by lower tubes 215"). Additionally, the specification uses "coupled to" in conjunction with "support" (*e.g.*, "Referring now to FIGS. 14 and 15 . . . Upper frame tubes 88 are coupled to support tubes 83 which are coupled on a lower end to inner rails 72.") In other words, as used by the patentee, two components can be coupled without one supporting the other. Conversely, nothing in the language of the claims or the specification appears to require that a component must be directly coupled to another component in order to be supported by it. Because the specification distinguishes between "coupled to" and "supported by," the Court declines to adopt either parties' definitions insofar as they construe "supported by" to mean simply "coupled to" or "connected to."

Moreover, while the preferred embodiment disclosed in the figures shows the engine and rear suspension coupled to brackets on the rear frame, that does not by itself show that the patentee intended to limit "supported by" either to require a direct connection or an additional "support" component such as a bracket. "It is . . . not enough that the only embodiments, or all of the embodiments, contain a particular limitation," to establish that the patentee disavowed claim scope or acted as his own lexicographer with respect to a claim term. *Thorner*, 669 F.3d at 1366.

Defendants contend, however, that Plaintiff's response to Arctic Cat, Inc.'s second petition for *inter partes* review of the '405 patent cannot be reconciled with Plaintiff's proposed construction. (Defs.' Resp. Br. at 10.) Defendants point to Plaintiff's statement to

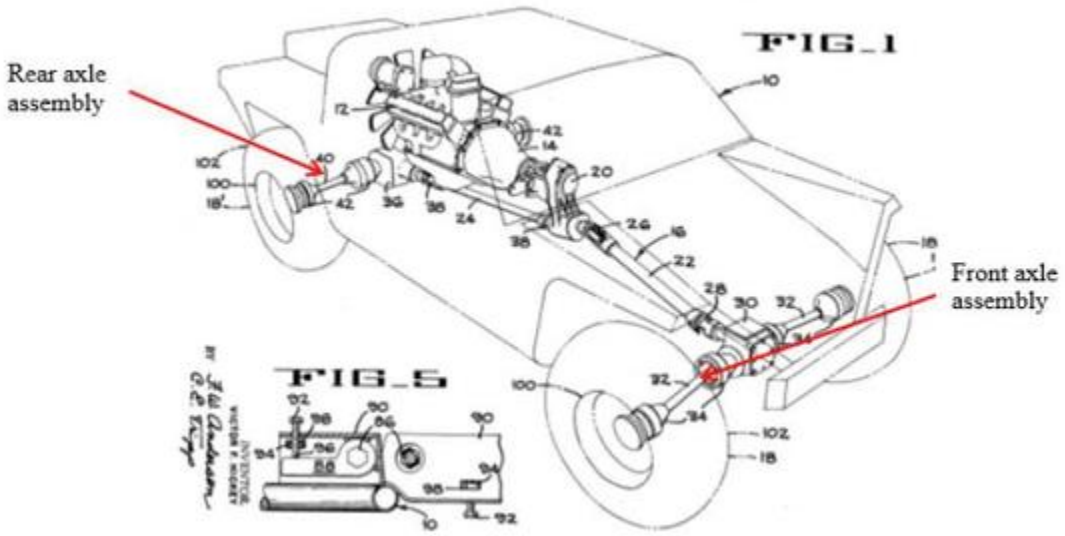
the USPTO that the Hickey patent

> . . . does not disclose a front axle assembly **supported** by the front frame portion and drivingly coupled to the front wheels as recited in claim 34. To the contrary, Hickey's front differential (numeral 30) appears to be shown as **not** being supported by the front frame portion; and Petitioner does not identify any portion of the front frame portion supporting the front differential . . .

(*Id.*; Shewchuk Decl. Ex. 25 at 13 [Doc. No. 174-2] (emphasis in original).)[8]

Arguing that all or part of the weight of the front differential in the Hickey vehicle must be "carried by or coupled to" the vehicle's front frame portion, Defendants contend that Plaintiff's interpretation of the term "supported by" in the *inter partes* proceeding must therefore have been narrower than the construction Plaintiff now offers this Court, *i.e.*, that it must require a direct connection between the component and the applicable frame portion. (Defs.' Resp. Br. at 10.) The Court does not reach the same conclusion. Figure 1 of Hickey does not describe where or how the differential is supported, and so the Court cannot

[8] Plaintiff's response referred to Figure 1 of the Hickey patent:



(Shewchuk Decl. Ex. 25 at 13 [Doc. No. 174-2].)

assume that in distinguishing Hickey, Plaintiff intended to limit "supported by" to require a direct connection.

The parties' constructions appear to have some areas of agreement. For example, they seem to agree that "supported by" does not mean "supported entirely by." In other words, a component may meet this limitation so long as (in Plaintiff's construction) it is at least in part coupled to or carried by the applicable frame portion, or (in Defendants' construction) it is connected by at least one support to that frame portion. At the same time, it is implicit in both proposed constructions (and necessary to give meaning to the use of "front" and "rear" in identifying the relevant frame portion) that not every component attached to or carried by *some* portion of the frame is therefore "supported by" *all* portions of the frame. Accordingly, "supported by" must mean something more than that the weight of the component puts some calculable load on the identified frame portion. The Court recommends, therefore, that the term "[component] supported by the rear frame portion" be construed as follows:

[component] is carried in whole or in significant part by the rear frame portion

4. "front drive shaft" and "rear drive shaft"

Plaintiff argues that the terms "front drive shaft" and "rear drive shaft" do not require construction. But, if construction is necessary, Plaintiff argues that the terms should be construed within the context of the clause in which they appear, *e.g.*, "front drive shaft extending between the transmission and the front differential for coupling the transmission to the front wheels," and "the front drive shaft extending under the protective

panel." (Pl.'s Opening Mem. at 19.) Should the Court construe the terms in isolation, Plaintiff proposes the following definition for "front drive shaft":

> A shaft assembly that transfers mechanical power from the transmission to the front [differential (as in claim 1 of the '220 patent) or axle assembly (as in claim 34 of the '405 patent)]. The shaft assembly may include multi-part drive shafts and related componentry (*e.g.*, universal joints, couplers and bearings).

(*Id.* at 20.) And for "rear drive shaft":

> A shaft assembly that transfers mechanical power from the transmission to the rear [differential or axle assembly]. The shaft assembly may include multi-part drive shafts and related componentry (*e.g.*, universal joints, couplers and bearings).

(*Id.* at 27.)

Meanwhile, Defendants offer this construction:

> A shaft is an undampened rotating straight bar, outside the engine and transmission. The front drive shaft, regardless of where it is on the vehicle, is a shaft that drives the front wheels. The front drive shaft does not include the universal joint, the coupler, or the output shaft of the transmission. The rear drive shaft, regardless of where it is on the vehicle, is a shaft that drives the rear wheels.

(Defs.' Claim Construction Opening Br. at 21-23.)

The Court considers the terms within the context of the respective clauses in which they appear. As the Federal Circuit instructed, "[w]hile certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms." *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003).

At the heart of the parties' differing proposed constructions are two disputes:

(1) whether the term "drive shaft extending between [or under] . . ." as used in these claims should be construed to include any hardware (*e.g.*, universal joints, couplers, or bearings) that may be used to connect the drive shaft to the transmission; and (2) whether "drive shaft" as used in the claims can only refer to a rotating straight bar or can include a multi-part drive shaft assembly and/or components that would provide a dampening function.

a. Whether the drive shaft includes hardware used to connect the drive shaft to the transmission

Claim 1 of the '220 patent reads in part, "An all-terrain vehicle including . . . a front drive shaft extending between the transmission and the front differential for coupling the transmission to the front wheels," and "a rear drive shaft extending between the transmission and the rear differential for coupling the transmission to the rear wheels." The claims do not specifically call out connecting components such as universal joints, couplers, and bearings, but neither do they use language that excludes such hardware. Furthermore, as Plaintiff notes, Claim 1 (and other claims that employ the term in a similar context) states that the drive shaft "extend[s] between the transmission and the front [or rear] differential for coupling the transmission to the front [or rear] wheels." Read in the context of the specification, which describes an embodiment in which a U-joint and coupler are attached to the drive shaft to permit it to extend to and engage with the output shaft of the transmission, ('220 patent, col. 7, ll. 34-57 and Fig. 19), it is apparent that the components attached to the shaft for the purpose of effecting the connection to the transmission and the coupling of the transmission with the wheels must be considered part of the extension of the shaft. Otherwise, as Plaintiff observes, the

shaft would stop short of the transmission and even the preferred embodiment described in the specification would not be covered. As the Federal Circuit noted in *Vitronics*, reading out a preferred embodiment is "rarely, if ever, correct." 90 F.3d at 1583.

Defendants argue, however, that the very language cited by Plaintiff in the specification distinguishes couplers and universal joints from the drive shaft. Referring to Figure 19:

> The extending end of output shaft **138** includes splined portion **140** which is adapted to engage the interior circumference of coupler **142**. *Coupler **142** is coupled to universal joint **144**. Universal joint **144** connects coupler **142** to front drive shaft **146*** which powers the front wheels of ATV **10** through a front differential **147** (FIG. 1) and through front axle half shafts **206** (FIG. 22). Coupler **142** may move in a fore and aft direction on splined portion **140** of output shaft **138** while remaining engaged with splined portion **140**. *During vigorous driving, front drive shaft **146** may move in the fore and aft direction causing coupler **142** to slide longitudinally on splined portion **140** of output shaft **138** while front drive shaft **146** remains rotationally coupled with output shaft **138***.

('220 patent, col. 7, ll. 40-58 (emphasis added).) Figure 19 shows these parts in relation to each other:

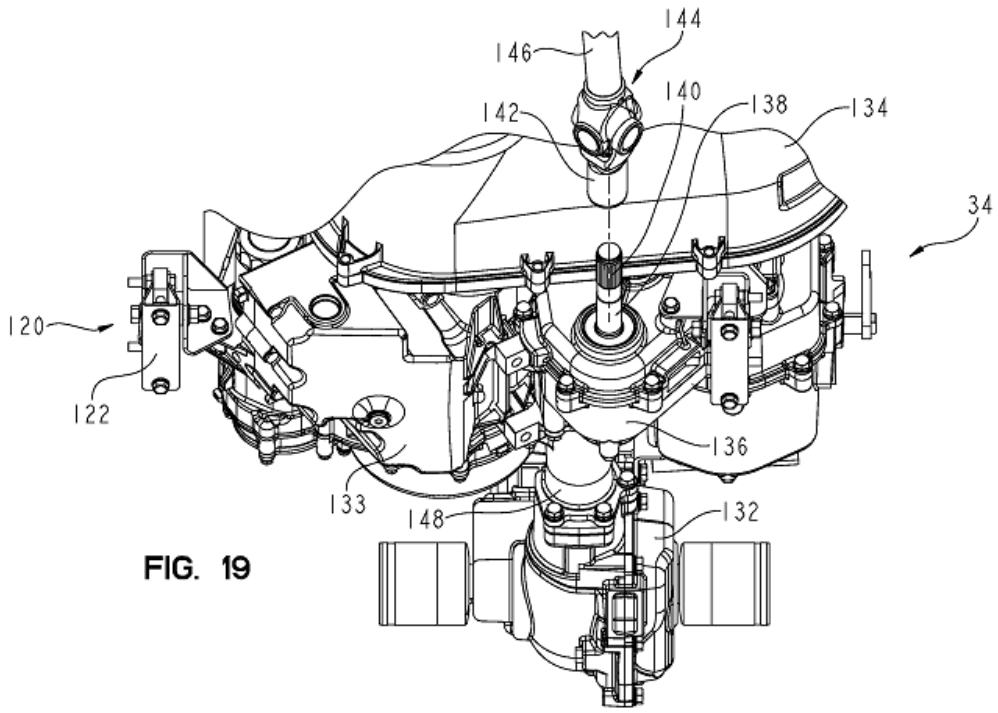


FIG. 19

Thus, the front drive shaft, coupler, and universal joint are separately identified, both in the language of the specification and in Figure 19. While this would tend to lend credence to Defendants' position, when considered in context, particularly where Defendants' construction would appear to read out the preferred embodiment, the Court does not conclude that the separate identification of these connecting components in Figure 19 requires it to exclude those components from the construction of "front drive shaft extending between the transmission and the front differential for coupling the transmission to the front wheels," and "rear drive shaft extending between the transmission and the rear differential for coupling the transmission to the rear wheels."

Defendants also point to the prosecution history, specifically Plaintiff's December 1, 2014, discussion of the oft-cited Hickey patent in its response to Arctic Cat's Second Petition for *Inter Partes* Review of the '405 patent. They note that Plaintiff highlighted

the front drive shaft of the Hickey patent in red and did not extend that color to include any of the connecting components (Shewchuk Decl. Ex. 25 at 10 [Doc. No. 174-2]), in contrast to Plaintiff's current position that all of those components should be included in its proposed "shaft assembly" construction. But the cited discussion focused on Plaintiff's argument that the drive shaft of the Hickey vehicle, regardless of how connected, did not "extend[] forward of the transmission" as claimed in Claim 34 of the '405 patent. (*Id.* at 20.) Plaintiff argued the drive shaft of the Hickey vehicle was coupled to an interaxle differential, which in turn was attached to the transmission. (*Id.*) Nothing about Plaintiff's argument depended on whether the connecting hardware was included or excluded from the scope of the term "drive shaft" for construing the asserted claims. [9]

Finally, the Court finds that the extrinsic evidence submitted by Plaintiff also supports its position and resolves any ambiguity in the specification. Plaintiff offered several classroom and shop manuals for manual transmissions and transaxles, which, *inter alia*, describe a drive shaft as "normally made from seamless steel tubing with universal joint yokes welded to both ends of the shaft," and as "a steel tube normally consisting of two universal joints and a slip joint . . . ." (Bullard Decl. Ex. J at A1825, A1827 [Doc. No. 168-13]; *see* Bullard Decl. Ex. K at A1852-54 [Doc. No. 168-14], Ex. O at A1882-83 [Doc.

[9] Plaintiff also claims the prosecution history supports its position. Plaintiff included in its original application a claim reciting that the vehicle "compris[ed] a driveshaft adapted to power at least one of the pair of front wheels, the transmission including a splined output shaft, and the drive shaft *including a coupler* adapted to operably couple with the splined output shaft." (Bullard Decl. Ex. 5 [Doc. No. 168-5] (emphasis added).) The Court does not find this particularly helpful to either party, as the claim that contained that language did not end up in the patent as issued.

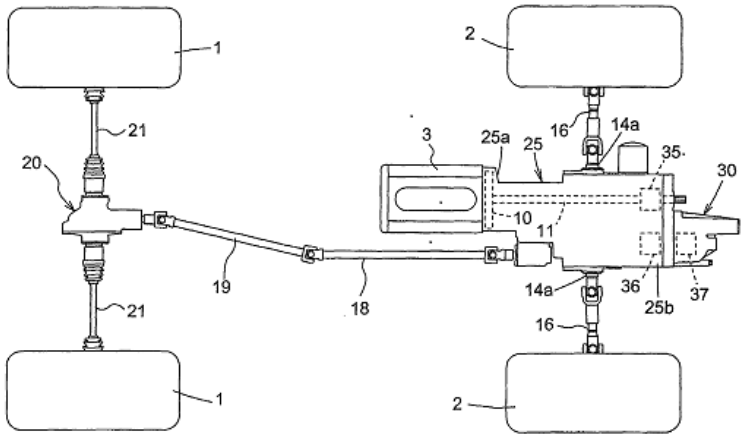
No. 168-18], Ex. Q at A1890 [Doc. No. 168-20], Ex. S at A1917-20 [Doc. No. 168-22], Ex. V at A1940 [Doc. No. 168-25], and Ex. W at A1941 [Doc. No. 168-26].) Its expert, Dr. Moskwa, noted that drive shafts are "typically manufactured so that they include at least the yolk, which is half the U-joint," and opined that "[w]hen persons of ordinary skill in the art refer to drive shafts, they intend to include the half yolk as well as any other connectors used therewith." (Moskwa Decl. ¶ 18 [Doc. No. 176].) He further opined the disclosures in the manuals cited by Plaintiff "are consistent with what persons of skill in the art understand drive shafts to be." (*Id.* ¶ 21.) Indeed, Defendants' own manuals appear to adopt this convention. (*See* Bullard Decl. Ex. L at A1858-60 [Doc. No. 168-15], Ex. M at A1870-72 [Doc. No. 168-16], Ex. O at A1882, and Moskwa Decl. ¶¶ 18-19.) Although the extrinsic evidence is entitled to less weight than intrinsic evidence in the Court's analysis, it does provide further insight into how one of ordinary skill in the art would understand the term "drive shaft" in the context of the asserted claims. *See Spansion, Inc. v. Int'l Trade Comm'n*, 629 F.3d 1331, 1344 (Fed. Cir. 2010) ("While claim construction primarily relies on intrinsic evidence, extrinsic evidence, such as expert testimony, may also be used when given the appropriate weight by the trial court.").

b. Whether "drive shaft" as used in the claims refers only to an undampened straight bar or can include a multi-part drive shaft or dampening components.

Defendants urge the Court to conclude that the drive shaft should be construed to include only a single shaft, *i.e.*, a rotating straight bar, while Plaintiff argues that it should be understood to encompass multi-part drive shafts.

Looking first to the patents-in-suit, the Court notes nothing in the claims or in the specification limiting the rear or front drive shafts to a single bar, or disclaiming multi-part shafts. The prosecution history, moreover, would seem to support Plaintiff's argument that the plain and ordinary meaning of "drive shaft" can include a multi-part shaft. In rejecting Plaintiff's claims as anticipated by Horiuchi (United States Patent No. 7,367,247), the examiner noted "a front drive shaft (19) extending between the transmission and the front differential for coupling the transmission to the front wheels." (Bullard Decl. Ex. D at A0243 [Doc. No. 168-4].) Figure 4 of the Horiuchi patent shows:

FIG.4



Although the examiner only referred to "front drive shaft (19)," she must necessarily have included the "additional shaft (18)" in order to describe the front drive shaft as "extending between the transmission and the front differential for coupling the transmission to the front wheels." Plaintiff also offered extrinsic evidence tending to show that those of skill in the art would understand "drive shaft" to include multi-part shafts. (*See* Bullard Decl. Ex. J at 1828, Ex. K at A1851-52.)

Defendants argue, however, that inventor Aaron Deckard disavowed multi-part drive shafts when he made the following statement during prosecution, in a declaration describing an early prototype vehicle:

> The concept vehicle did not have a continuous rear drive shaft extending between the transmission and a rear differential for coupling the transmission to the rear wheels. The vehicle had a dampening coupler disposed between the engine and a rear differential that allowed for power transmission therebetween.

(Defs.' Opening Br. at 22-23, 40-41; Shewchuk Decl. Ex. 20 [Doc. No. 170-25].) Defendants argue that the reference to a "continuous" drive shaft disavows multi-part drive shafts. But the Federal Circuit has been clear that a disavowal must be clear and unambiguous. *3M Innovative Props.*, 350 F.3d 1365 at 1373. That Deckard used the term "continuous" to describe the rear drive shaft in the patented vehicle does not, however, clearly and unambiguously disclaim multi-part shafts or connecting components. Accordingly, the Court does not find in Deckard's statement a disclaimer or disavowal of multi-part drive shafts.

Defendants also cite Deckard's declaration in urging the Court to adopt a construction of "drive shaft" that limits the term to an "undampened" bar. For the same reasons, however, the Court declines to include such a limitation. Nothing in the record before the Court describes precisely what the "dampening coupler" in the concept vehicle was, including whether, as Plaintiff's expert hypothesizes, it was "used in place of a rear drive shaft, for example, because the drive line was not finalized." (Moskwa Decl. ¶ 23.) In any event, nothing in the statement persuades the Court that the drive shaft of the patented invention must be "undampened."

On the other hand, the Court does not recommend wholesale adoption of Plaintiff's proposed construction, as the term "shaft assembly" may add more sweep and ambiguity than intended. Accordingly, the Court recommends that "drive shaft," as used in the context of the asserted claims for both front and rear drive shafts, be construed as:

drive shaft, including any connecting hardware (*e.g.*, universal joints, couplers and bearings)

5. "extending between"

Because of the context for the term "drive shaft," the Court turns next to the term "extending between." Plaintiff believes the term "extending between" does not require construction. If the Court concludes otherwise, however, Plaintiff urges the following construction:

> A shaft assembly extending the distance from the transmission to the [front differential (as in claim 1 of the '220 patent) or rear differential (as in claim 34 of the '405 patent)] that transfers mechanical power from the transmission to the [front differential] (as in claim 1 of the '220 patent) or rear differential (as in claim 34 of the '405 patent)]. The shaft assembly may include multipart drive shafts and related componentry (*e.g.*, universal joints, couplers and bearings).

(Pl.'s Opening Mem. at 22.) Defendants propose instead that "extending between" be construed to mean "continuously extending the entire distance from one component to the other component." (Defs.' Opening Br. at 39.) Setting aside the issues that the Court has already addressed in the previous section, the dispute boils down to whether "extending between" means "extending the distance" or "continuously extending the entire distance." (*See* Defs.' Opening Br. at 39.)

Although the parties seek construction of the term "extending between" only in the context of the claims involving the front and rear drive shafts, the Court looks to the specification to shed light on how the patentee used the term in other contexts:

- "In the illustrative embodiment shown in FIG. 2, wheelbase A, which extends between the center of front axle **36** and the center of rear axle **38**, is equal to about 77 inches (195.6 centimeters)." ('220 patent, col. 4, ll. 8-12.)

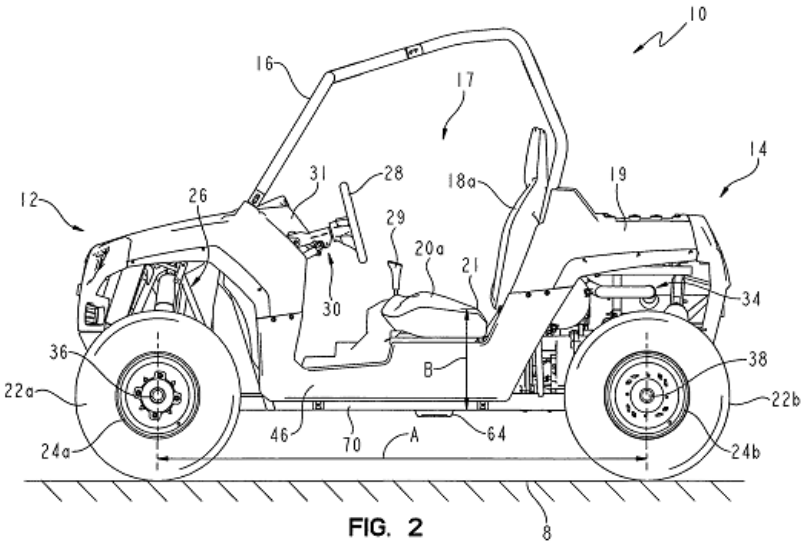


FIG. 2

- "Referring now to FIGS. 3 and 4, a front view and top plan view of ATV **10** is shown. In the illustrative embodiment, width C, which is defined as the overall width of ATV **10**, extends between the outermost lateral points of ATV **10**." ('220 patent, col. 4, ll. 25-29.)

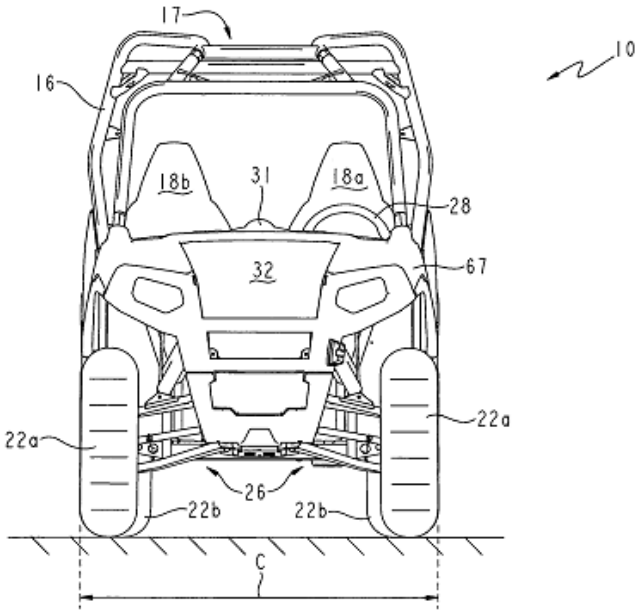


FIG. 3

- "Referring now to FIGS. 20 and 21, components of the rear suspension of ATV **10** is shown . . . Front brackets **162** and rear brackets **160** extend between lower tubes **180** and down tubes **105**." ('220 patent, col. 7, ll. 59-60, col. 8, ll. 8-6.)

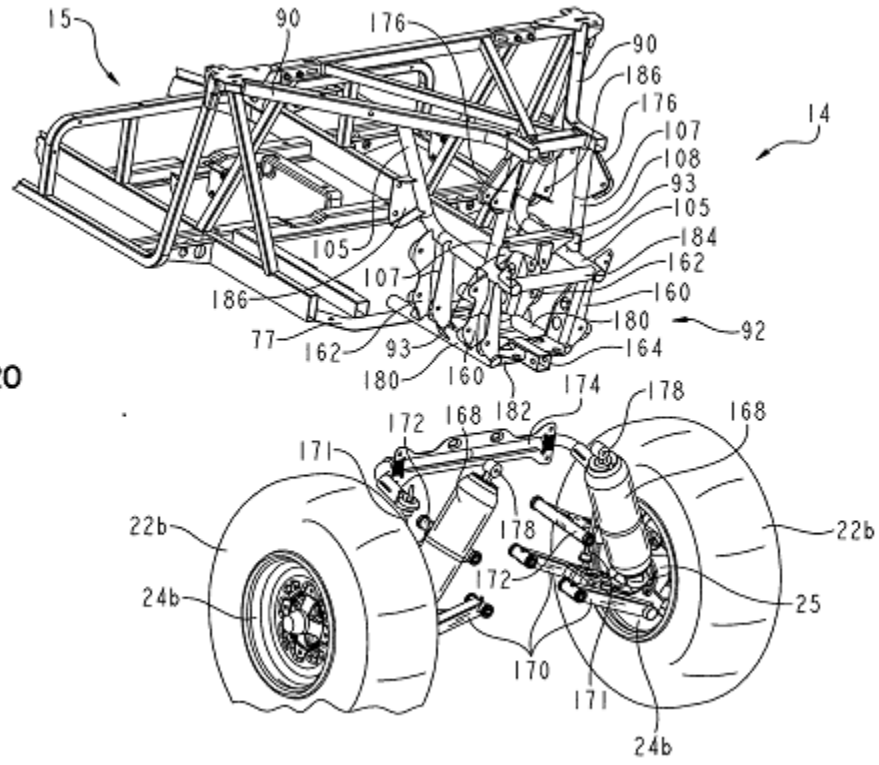
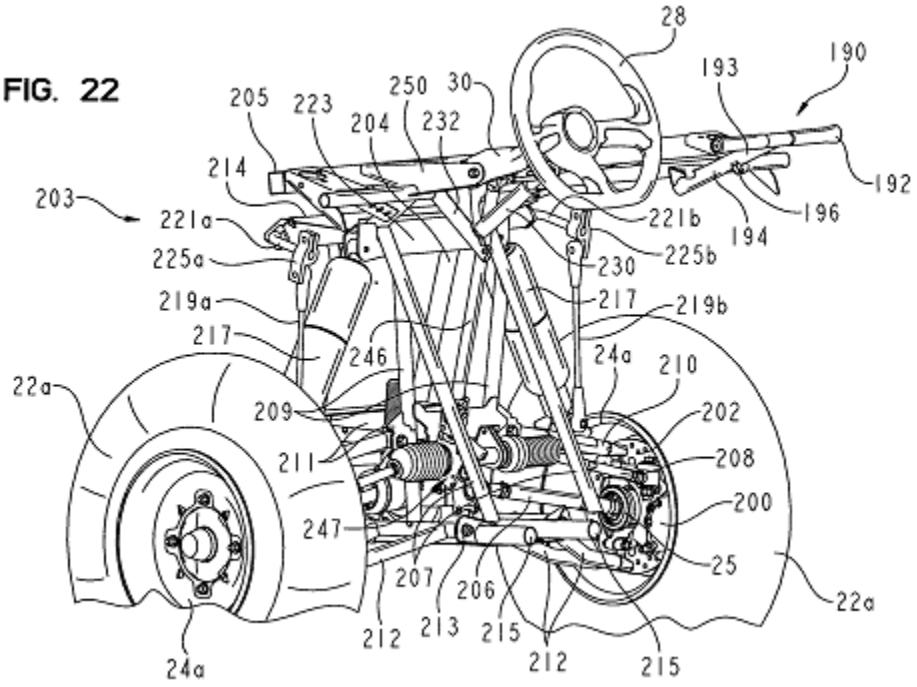


FIG. 20

- "Referring now to FIGS. 22-24, components of the front suspension, including right front brake assembly **199** are shown . . . Upper ends of dampeners **217** are pivotally coupled to bracket **223** extending between rear tubes **207**." ('220 patent, col. 8, ll. 39-41, ll. 52-54.)



The Court notes that in each of these instances, as well as in the uses of "extending between" in connection with the drive shafts, the component or measurement identified as "extending between" two points extends the entire distance between the points and does so without the interjection of another assembly.[10]

[10] Plaintiff's discussion of the Hickey patent in the *inter partes* review of the '405 patent, discussed *supra*, Part III(B)(4)(a), sheds additional light. Although the term under discussion there is "extending forward of" rather than "extending between," the Court nevertheless finds it instructive that Plaintiff distinguished the front drive shaft of the Hickey vehicle on the ground that it did not "extend[] forward of the transmission" as claimed in Claim 34 of the '405 patent, but instead was connected to an interaxle differential, which in turn was attached to the transmission. (Shewchuk Decl. Ex. 25 at 20 [Doc. No. 174-2].). This lends further support to the conclusion that where the patentee used the term "extending" in describing the position of a component with

Having determined "extending between" means "extending the entire distance," the Court next analyzes whether this construction must include "continuously," as Defendants propose. While, as Defendants note, inventor Deckard's affidavit during prosecution distinguished the concept vehicle from the patented invention by noting the concept vehicle did not have a "continuous rear drive shaft extending between the transmission and a rear differential for coupling the transmission to the rear wheels" (Shewchuk Decl. Ex. 20 at 3), the Court has already found that multi-part drive shafts were not disclaimed during prosecution. There is nothing to suggest Deckard distinguished the concept vehicle based on whether the drive shaft extended the distance or "continuously" extended the distance.

The Court construes the term "extending between" to mean "extending the entire distance." Thus, in the context of the claim limitation pertaining to the front drive shaft in claim 1 of the '220 patent, for example, the phrase would be construed as "front drive shaft, including any connecting hardware (*e.g.*, universal joints, couplers and bearings), extending the entire distance between the transmission and the front differential for coupling the transmission to the front wheels." The Court declines, however, to include the word "continuously," for two reasons. First, it is not necessary in light of the language "extending the entire distance." Second, it may introduce confusion about whether multi-part drive shafts are included. (*See supra*, Part III(B)(4).) Accordingly, the Court recommends that "extending between" be construed as:

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reference to one or more other components, it intended to convey that there was no additional assembly (other than hardware) interposed between the components.

extending the entire distance between

6. "protective panel"

Plaintiff argues this term does not require construction, but if construction is needed, then the following is proposed: "A panel that protects passengers in the ATV from moving parts of the engine assembly, as well as, assists in shielding noise." (Pl.'s Opening Mem. at 28-29.) Meanwhile, Defendants propose this construction:

> A panel is a thin sheet of material. The panel is "protective" by separating the seating area from the engine. Transmission belt covers and other parts of the engine are not the protective panel.

(Defs.' Opening Br. at 23.)

The Court notes at the outset that both the specification and the prosecution history reveal some confusion about which component depicted in the specification is the claimed "protective panel." Two different features in the figures are labelled as 134 and identified in the text as the "protective panel." One appears in Figure 19 and the other appears in Figures 25 and 26:

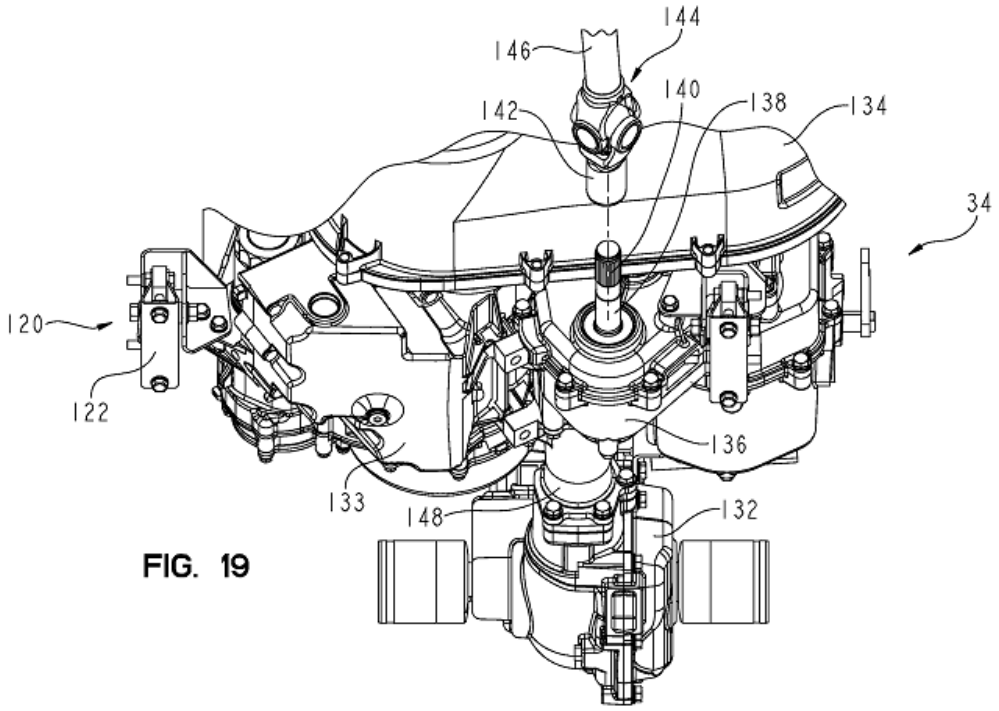

FIG. 19

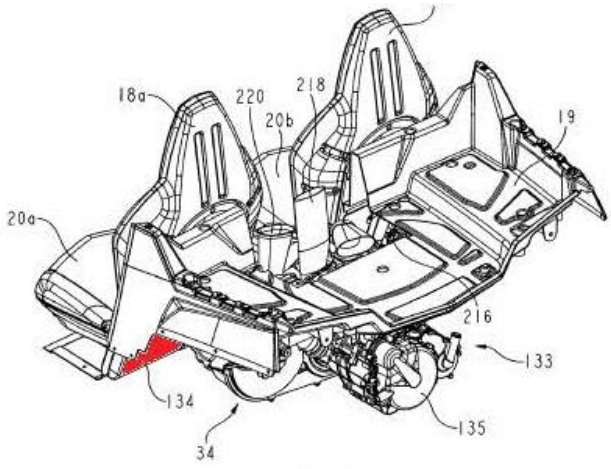

FIG. 25

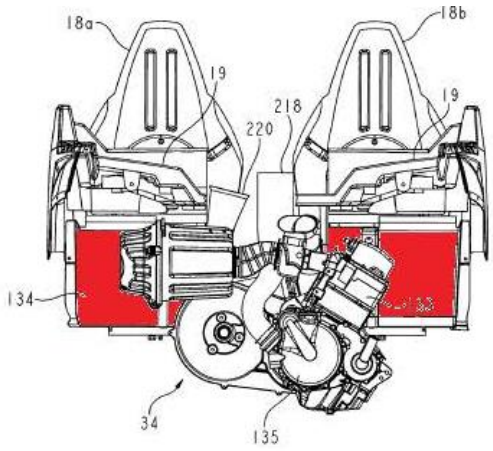

FIG. 26

(highlighting added by parties) (Pl.'s Opening Mem. at 29; Defs.' Resp. Br. at 16.)

Adding to the confusion, the only narrative discussion in the specification appears in reference to Figure 19:

> As shown in FIG. 19, output shaft **138** extends under protective panel **134**. Protective panel **134** is positioned behind upper and lower seating surfaces **18** *a*, **18** *b* and **20** *a*, **20** *b* and protects passengers in ATV **10** from moving

> parts of modular engine assembly **34**, as well as, assists in shielding from noise.

(*E.g.*, '220 patent, col. 7, ll. 40-45.)

The parties, however, agree that the protective panel referred to in the claims is the structure labelled as 134 in Figures 25 and 26, and *not* the structure that appears in Figure 19, which is the transmission or "CVT" cover. (Pl.'s Opening Br. at 29; Defs.' Opening Br. at 26; Pl.'s Resp. Mem. at 20.)[11] The Court agrees, and construes the term based on that understanding.

Claim 1 of the '220 patent discloses "[a]n all-terrain vehicle including . . . a protective panel positioned between the pair of laterally spaced-apart seating surfaces and the engine wherein the front driveshaft extends under the protective panel." Other claims also contain limitations relating to the location of the panel vis à vis other vehicle components or areas. (*See, e.g.*, the '125 patent, claims 7, 20, and 21.) But the only

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[11] The parties' submissions also discuss the conclusions of the examiner in denying Defendants' request for *inter partes* reexamination. On the one hand, he declared Defendants' statement that panel 134 in Figure 19 was only the transmission belt cover and not the protective panel to be entirely unfounded, but on the other hand stated:

> Transmission belt covers and other parts of the engine are not protective panels as contended by the third party requester. These pieces of the engine are part of the engine and are included in the engine. The protective panel in [Plaintiff's patent] is a separate piece from the engine.

(Shewchuk Decl. Ex. 13 at 5 [Doc. No. 170-13].) Although an examiner's statement during reexamination may be relevant for claim construction, courts "are guided by legal principles dictating that we rest on the statements made by the patentee over conflicting statements of an examiner because it is the patentee's words that define the claim." *3M Innovative Prop. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1332 (Fed. Cir. 2013) (citations omitted). Given the ambiguity of the statements here, the Court does not find them particularly helpful in construing this term.

other description of the panel itself in the patent is found in the language quoted above from the specification, which states that its purpose is to protect passengers from moving parts of the engine assembly and assist in shielding from noise. Nothing in the claims or the specification discusses the relative thickness of the material used. Moreover, although the specification states that the panel should protect passengers from moving parts of the engine assembly, suggesting that it will in some way separate the passenger from those moving parts, Defendants' proposed construction of "protective panel" as one that must "separate the seating area from the engine" interjects more ambiguity than it resolves, and potentially adds a limitation to the term "protective" – that of effecting a separation between the entirety of the seating area and the engine – that is not supported by the claims or the specification. Whether or not such a separation may be required by other limitations in the claims pertaining to the protective panel, it does not belong in the construction of the term itself.

Finally, while the parties agree that the component labelled as 134 in Figure 19 is a transmission belt cover and not the claimed protective panel, the language proposed by Defendants that "engine parts" are not the "protective panel" invites argument about whether, for example, the claimed protective panel could be fastened to the engine, emphasizing that the transmission cover is "bolted in at least three locations on the front of the modular engine assembly 34," (Defs.' Opening Br. at 24), a distinction for which the Court finds no support.

For all of these reasons, the Court does not adopt Defendants' construction. But given that the specification makes clear what is not necessarily apparent on the face of

the term, *i.e.*, the protective panel is one that "protects passengers in the ATV from moving parts of the engine assembly," as opposed to the variety of other equipment or environmental hazards one might encounter off-road, the Court recommends the term "protective panel" be construed as:

> a panel that protects passengers in the ATV from moving parts of the engine assembly, and assists in shielding noise

7. "positioned between the pair of laterally spaced-apart seating surfaces and the engine"

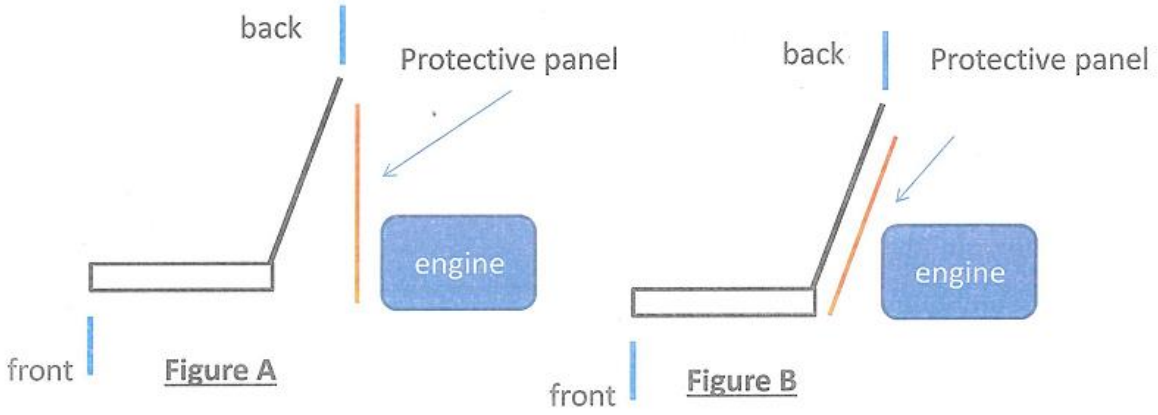
The parties dispute the meaning of the term "positioned between the pair of laterally spaced-apart seating surfaces and the engine." Plaintiff does not believe construction is necessary, but proposes the following if it is required: "Separating the seating surfaces from the engine." (Pl.'s Opening Mem. at 30-31.) Defendants, on the other hand, advocate this construction:

> The protective panel must be positioned behind the pair of seats and in front of the engine, and cannot be positioned between the front and back edges of the spaced apart seating surfaces.

(Defs.' Opening Br. at 28.)

The claim language calls out "a protective panel positioned between the pair of laterally spaced-apart seating surfaces and the engine." ('220 patent, col. 11, ll. 29-30.) Defendants point to nothing in the claim language that contemplates the limitations they propose. Likewise, the specification does not support Defendants' construction, and if anything, militates against it. By prohibiting the protective panel from being positioned

between the front and back edges of the spaced apart seating surfaces, Defendants appear to require the arrangement depicted in Figure A and potentially bar the arrangement in Figure B below:[12]



But Figure B is, in effect, the preferred embodiment of Figure 6[13] of the patents-in-suit:

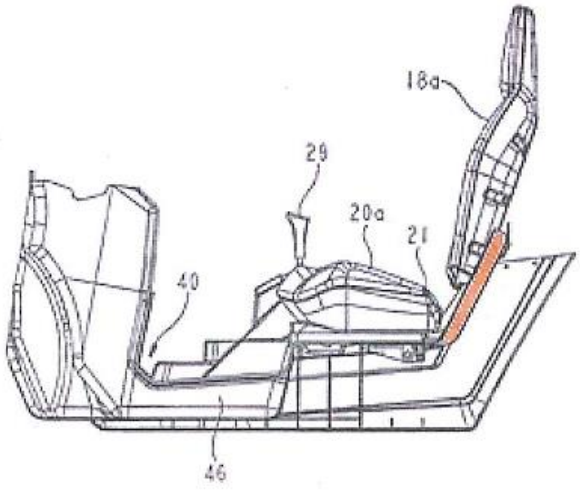


FIG. 6

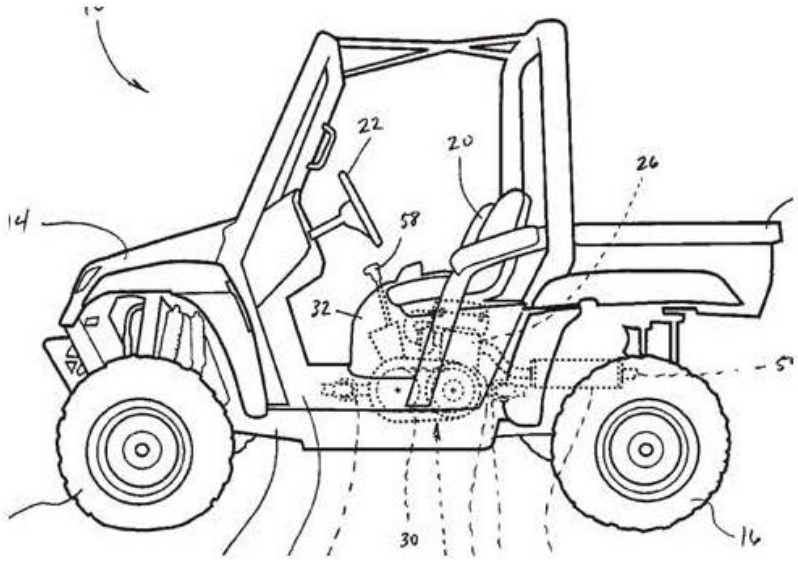
[12] Figures A and B were created by Plaintiff and offered at the *Markman* hearing. The Court uses them here for illustrative purposes only.

[13] Plaintiff highlighted what it identifies as the protective panel in orange, and offered this figure at the *Markman* hearing. Defendants did not challenge the highlighting. The Court uses it here for illustrative purposes only.

(*E.g.*, '220 patent, Fig. 6 (orange highlighting of protective panel added).) Defendants' proposal potentially excludes a preferred embodiment, and there is no "highly persuasive evidentiary support" for their construction. *See Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1308 (Fed. Cir. 2003) (quoting *Vitronics*, 90 F.3d at 1583).

To support their construction, Defendants cite the examiner's discussion of several prior art references in his denial of their request for *inter partes* reexamination of the '220 patent, to wit, Kalsnes (United States Patent No. 7,438,153), Furuhashi (United States Patent No. 5,327,989), and Kato (United States Patent Application Publication 2004/0206567). (Defs.' Opening Br. at 28-31.)

Referring to Kalsnes, Defendants point to the following diagram and excerpt from the reexamination denial order:



(Defs.' Opening Br. at 29; Shewchuk Decl. Ex. 23 at 2 [Doc. No. 170-28].)

> The requester says the floor panel or a projection in the floor panel in Kato '034 is an [sic] protective panel. Again, this is completely incorrect and not

> based upon any facts. The request points to the engine cover 32 in Kalsnes. However, this cover is between the seats and not *between the pair of laterally spaced-apart seating surfaces and the engine*.

(Defs.' Opening Br. at 29; Shewchuk Decl. Ex. 13 at 6 [Doc. No. 170-13] (emphasis in original).) What immediately follows that statement, however, is the examiner's discussion distinguishing Kalsnes because "[t]he engine in Kalsnes is NOT *positioned rearwardly of the seating area* as recited in Sunsdahl [Plaintiff's invention]."[14] (Shewchuk Decl. Ex. 13 at 6 [Doc. No. 170-13] (emphasis in original).) Because the positioning of the engine and seating area differs for Kalsnes and the patents-in-suit, the examiner's language prohibiting the engine cover from being "between the pair of laterally spaced-apart seating surfaces and the engine" does not assist the Court with claim construction here.

Likewise, the Furuhashi reference does not assist the Court. Furuhashi teaches a bottom plate (170) located under the seat cushion (81). ('989 patent, col. 14, ll. 27-30; Shewchuk Decl. Ex. 21 [Doc. No. 170-26].) In rejecting Defendants' reexamination request, the examiner stated:

> This plate 170 is part of the seat as clearly described and shown in Furuhashi. It is not *a protective panel positioned between the pair of laterally spaced-apart seating surfaces and the engine wherein the front driveshaft extends under the protective panel*.

(Shewchuk Decl. Ex. 13 at 6 [Doc. No. 170-13] (emphasis by examiner).) Without more, this statement does not inform the question of whether a protective panel that is positioned between the seating surfaces and the engine can include a portion that is between the seats.

[14] Plaintiff's claimed engine is "positioned rearwardly of the seating area."

Finally, with respect to the Kato reference, the examiner commented that of the "myriad of frame elements" identified by Defendants as the protective panel, "none of these frame members is a *panel positioned between the pair of laterally spaced-apart seating surfaces and the engine*." (*Id.* (emphasis by examiner).) Referring to frame member 300, the examiner stated:

> . . . this frame member is in a completely different part of the vehicle and is not *positioned between the pair of laterally spaced-apart seating surfaces and the engine*. In addition, the frame member is to protect the engine and not protect the passengers from the engine as disclosed in Sunsdahl [Plaintiff's invention].

(*Id.* (emphasis by examiner).) Frame member 300, however, is described as a "reinforcement member" in the application publication itself, and, as depicted in Figure 5 below, does not appear to be a protective panel at all.[15]

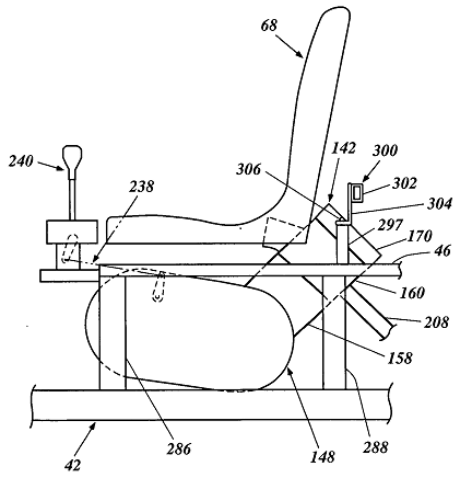


Figure 5

[15] Defendants refer to this figure as "Figure 7," but review of the Kato patent application publication shows it to be Figure 5 instead. (Defs.' Opening Br. at 30; Shewchuk Decl. Ex. 27 at 7 [Doc. No. 170-27].)

(Defs.' Opening Br. at 30.) Thus, the examiner's remarks here do not support Defendants' construction.

For these reasons, the Court declines to adopt Defendants' proposed language. The Court concludes that the claim language "positioned between the pair of laterally spaced-apart seating surfaces and the engine" has its plain and ordinary meaning, can be readily understood by the jury, and no construction is required.

8. "extends under"

The parties contest whether the claim language, "extends under," requires construction. Plaintiff believes no construction is necessary, but if the Court concludes otherwise, Plaintiff proposed the following at the *Markman* hearing: "The front drive shaft is under the bottom of the protective panel."[16] Meanwhile, Defendants advocate this construction: "extending to the other side of so as to overlap one another when viewed from directly vertically above." (Defs.' Opening Br. at 31.)

The Court looks first to the claim language. The term "extends under" appears in claim 1 of the '220 patent, for example: "An all-terrain vehicle including . . . a protective panel positioned between the pair of laterally spaced-apart seating surfaces and the engine wherein the front driveshaft extends under the protective panel." ('220 patent, col. 11, ll. 2,

[16] In its briefing, Plaintiff proposed:

> The front drive shaft has a portion that is below or lower than the protective panel and rearward of the front edge of the protective panel and also has a portion that is forward of the front edge of the protective panel.

(Pl.'s Opening Mem. at 21.) At the *Markman* hearing, Plaintiff stated that this construction was too lengthy, and instead proposed the construction above.

29-31.) Nothing in the claim language teaches or suggests a particular vantage point from which term should be assessed. The specification does not discuss the extension of the front drive shaft under the protective panel, but does use the term "extends under" in connection with Figure 19, describing output shaft 138 from the transmission as extending under the transmission cover.[17] ('220 patent, col. 7, ll. 40-41.)

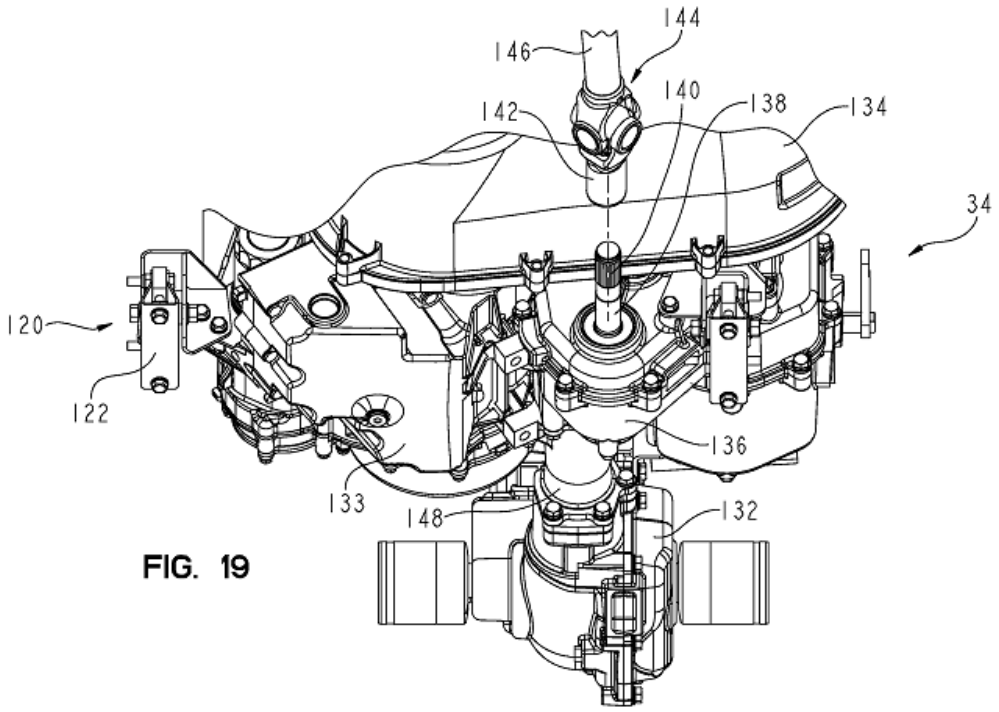


FIG. 19

Defendants' construction, in effect, requires the transmission to be behind the top of the protective panel.[18] But there is no textual support for this interpretation. Moreover,

[17] As previously noted, *supra* Part III(B)(6), the parties agreed that Figure 19 erroneously labelled the transmission cover as the protective panel.

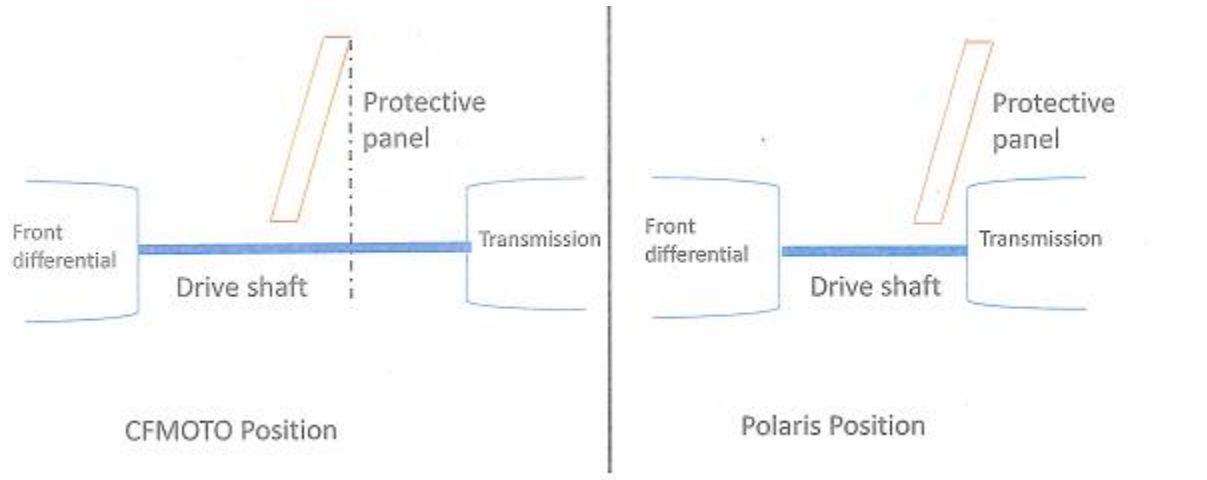
[18] At the *Markman* hearing, Plaintiff offered the following illustration of their respective positions:

such a reading is potentially inconsistent with the patents-in-suit. The specification of the '220 patent, for example, addresses the desirability of improved space utilization: "A wheelbase to seat height ratio greater than about 6.0 to 1 facilitates a relatively low vehicle center of gravity and further provides improved ergonomics, handling, and space utilization." ('220 patent, col. 4, ll. 21-25.) To require the transmission to be behind the top of the protective panel would not utilize space most efficiently, and is therefore potentially inconsistent with what the specification envisioned.

For these reasons, the Court does not adopt Defendants' construction. It finds that the plain and ordinary meaning of "extends under" would be apparent to a person of ordinary skill in the art. No further construction of this claim term is required.

9. "partially extends over"

Plaintiff argues that construction is unnecessary, but if required, the following construction is appropriate: "The upper rear frame portion has a portion that is above at least



Defendants did not take issue with this illustration, but noted they were not asking the Court to rule that the protective panel has to be vertical either. The Court uses this figure for illustrative purposes only.

one of the engine or transmission."[19] (Pl.'s Opening Mem. at 31-32.) Meanwhile, Defendants advocate this construction:

> extending to the other side of so as to overlap one another when viewed from directly vertically above. The language 'at least partially' signifies that one object may terminate under or over the other.

(Defs.' Opening Br. at 33.)

The Court examines the claim language first. The term "partially extends over" appears in claim 6 of the '220 patent: "The all-terrain vehicle of claim 3, wherein the upper rear frame portion at least partially extends over at least one of the engine or transmission." ('220 patent, col. 12, ll. 11-13.) It also appears in claim 12 of the '125 patent: "An all-terrain vehicle including: a frame, comprising a front frame portion, a mid frame portion and a rear frame portion . . . the upper rear frame portion at least partially extending over at least of the engine or transmission . . ." ('125 patent, col. 12, ll. 12-14, 18-20.) It also appears in non-asserted claim 8 of the '405 patent: "The all-terrain vehicle of claim 5, wherein the upper rear frame portion at least partially extends over at least one of the engine or transmission." ('405 patent, col. 11, ll. 42-44.) The claims do not require a viewing of the upper rear frame portion "from directly vertically above," or defining "at least partially" as "one object may terminate under or over the other." Defendants' construction, therefore, is textually unsupported by the patents.

[19] In its briefing, Plaintiff proposed, "The upper rear frame portion has a portion that is above or higher than at least one of the engine or transmission." (Pl.'s Opening Mem. at 31-32.) At the *Markman* hearing, Plaintiff stated it was dropping the word "higher" and simply proposing that the term be construed to mean that there is a portion that is above a part of at least one of the engine or transmission.

The Court next turns to the specification. While "partially extends over," does not appear in the specification, "extends over" appears in the specification twice. Both instances refer to Figure 1. The specification states, "Protective cage 16 extends over cab 17," and "Rear end 14 of ATV 10 includes engine cover 19 which extends over modular engine assembly 34, as shown in FIGS. 2, 14, and 15." ('220 patent, col. 3, ll. 53-54, col. 4, ll. 1-3.) Figure 1 is reproduced below:

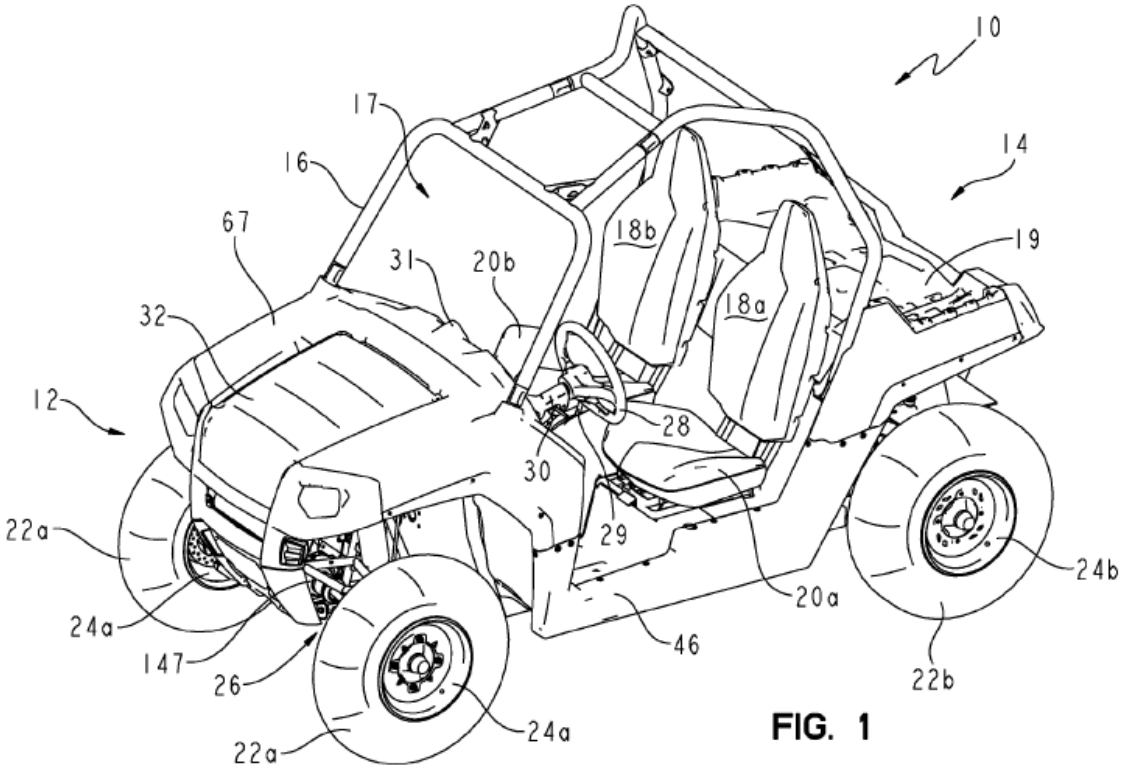
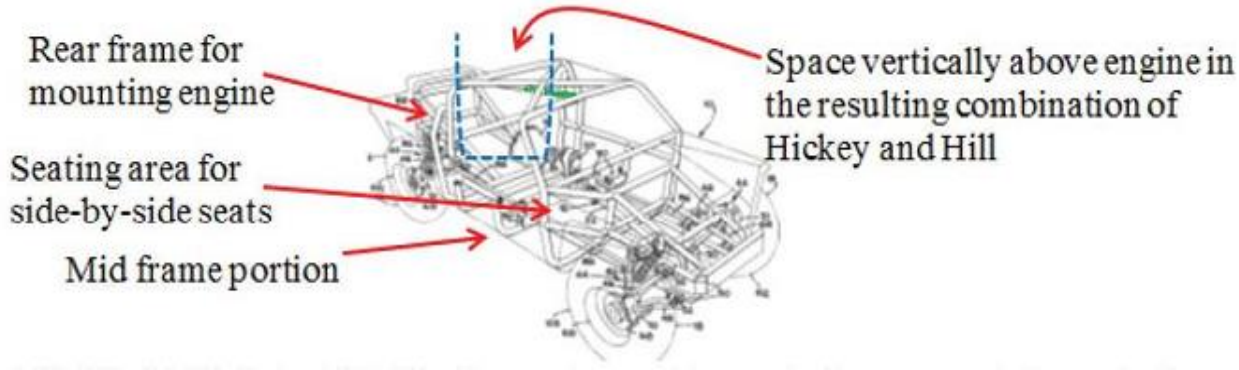


FIG. 1

Defendants argue the specification shows "extends over" should be construed as a single concept rather than "above or higher than" as in Plaintiff's initial construction. For example, Defendants argue Plaintiff's initial construction would lead to an entirely elevational definition, where a rear brace that was higher than the engine would "partially extend over" the engine even if it did not completely or partially overlap the engine.

Plaintiff's amended definition offered at the hearing, which takes out the elevational element, appears to assuage Defendants' concerns.

Defendants also point to Plaintiff's second preliminary response to Arctic Cat, Inc.'s petition for *inter partes* review of the '405 patent. (Defs.' Resp. Br. at 17-18.) Specifically, Defendants highlight Plaintiff's statement that in the Hickey reference, "[t]he engine and transmission appear to be centrally located, and the green piece does not at least partially extend over the at least one of the engine or transmission." (*Id.*; Shewchuk Decl. Ex. 25 at 41 [Doc. No. 174-2].) Plaintiff's statement referred to the following drawing from Hickey:



(Shewchuk Decl. Ex. 25 at 41 [Doc. No. 174-2] (shading and annotations added by Plaintiffs).) Without more, the Court does not see sufficient basis to conclude Plaintiff's position regarding Hickey in its response to Arctic Cat's IPR petition is at odds with its position on the term "partially extends over" in this case.[20]

[20] Defendants also challenge Plaintiff's "similar arguments" against the Denney and Furuhashi references in its first preliminary response to Arctic Cat, Inc.'s petition for *inter partes* review of the '405 patent, but without explaining why they are allegedly inconsistent with Plaintiff's claim construction position here. (Defs.' Resp. Br. at 18; Shewchuk Decl. Ex. 24 at 36 [Doc. No. 174-1].)

Accordingly, the Court recommends that Defendants' proposed construction be rejected and that the term "partially extends over" be given its plain and ordinary meaning. No further construction of this claim term is required.

10. "completely rearward of the seating area"

The parties dispute the meaning of "completely rearward of the seating area," which appears in all asserted claims of the '405 patent. For example, independent claim 34 of the '405 patent states, "An all-terrain vehicle comprising . . . a transmission coupled to the engine, the transmission being completely rearward of the seating area." ('405 patent, col. 12, ll. 55-67.) Plaintiff contends no construction is necessary, but should the Court find otherwise, Plaintiff proposes this construction: "Located behind the seats." (Pl.'s Opening Mem. at 33.) Meanwhile, Defendants offer this construction: "When viewed in profile from the side, entirely rearward of the trailingmost extent of the cab area." (Defs.' Opening Br. at 35.) Thus, Defendants construe "seating area" as synonymous with "cab area," and urge a construction of "completely rearward" such that the entire transmission must be located behind a vertical line running through the rearmost point of the cab area. Defendants illustrate their position with this image:

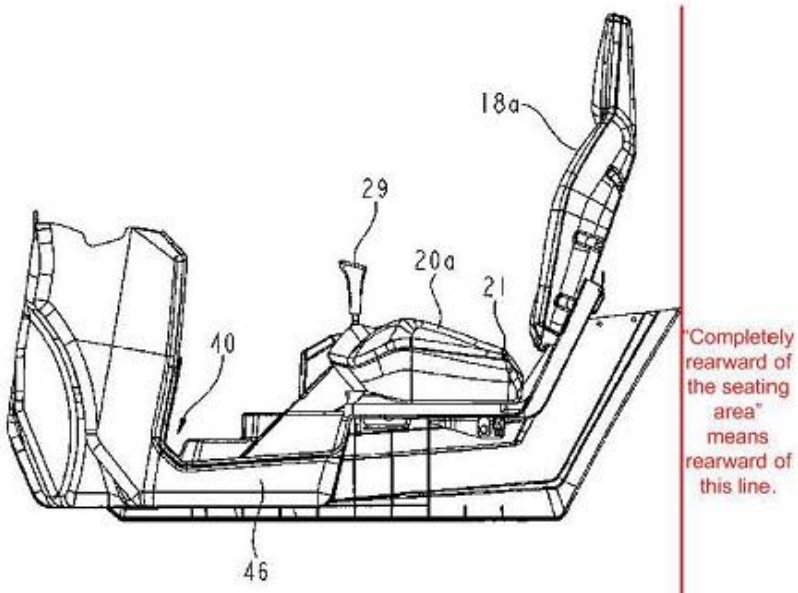


FIG. 6

(Defs.' Resp. Br. at 19.)

Defendants point to nothing in the claim that requires a viewing "in profile from the side," or positioning the transmission "entirely rearward of the trailingmost extent of the cab area." Instead, Defendants' proposed language derives from certain excerpts from the specification. For "cab area," they point to the following statement: "FIG. 5 is a partial perspective view of the cab area of the side-by-side ATV shown in FIGS. 1 through 4," "FIG. 6 is a partial profile view of the cab area shown in FIG. 5," and

> Referring now to FIG. 8, another illustrative embodiment of ATV **48** is shown including an additional safety bar **58**. In this embodiment, safety bar **58** couples between tube **56** and seat guard **50** to further enclose a passenger in the cab area of ATV **48**.

('220 patent, col. 2, ll. 13-16; col. 5, ll. 1-5.) As for the language "[w]hen viewed in profile from the side," Defendants cite the statement in the specification that

"FIG. 2 is a profile view of the side-by-side ATV shown in FIG. 1," and "FIG. 6 is a partial profile view of the cab area shown in FIG. 5."

But the Court sees nothing in the specification to indicate Plaintiff intended to equate the "seating area" with the "cab area,"[21] or, even if it did, to define the cab area as encompassing everything back to the point on the vertical line identified in Defendants' illustration above. Similarly, the fact that the cab area is identified on a figure drawn in side profile does not mandate that that perspective be incorporated into a claim construction of "seating area" or of the location of the transmission in relation to that area. Indeed, the detailed descriptions for Figures 2 and 6 do not even reference the transmission.

Moreover, Defendants' construction, which sets the forwardmost boundary of the transmission at the trailingmost extent of the cab area, would read out the preferred embodiment, demonstrated by applying this construction to Figures 2 and 9 of the '405 patent. As Plaintiff points out, Defendants' construction would result in requiring the transmission to be behind the orange line as shown below.

[21] While the term "seating area" is not defined in the specification, the specification does refer to the "seating surfaces," and describes them as being *within* the cab: "Referring initially to FIG. 1, . . . Upper and lower seating surfaces 18 and 20 are positioned within cab 17 of ATV 10." ('405 patent, col. 3, ll. 41-55.)

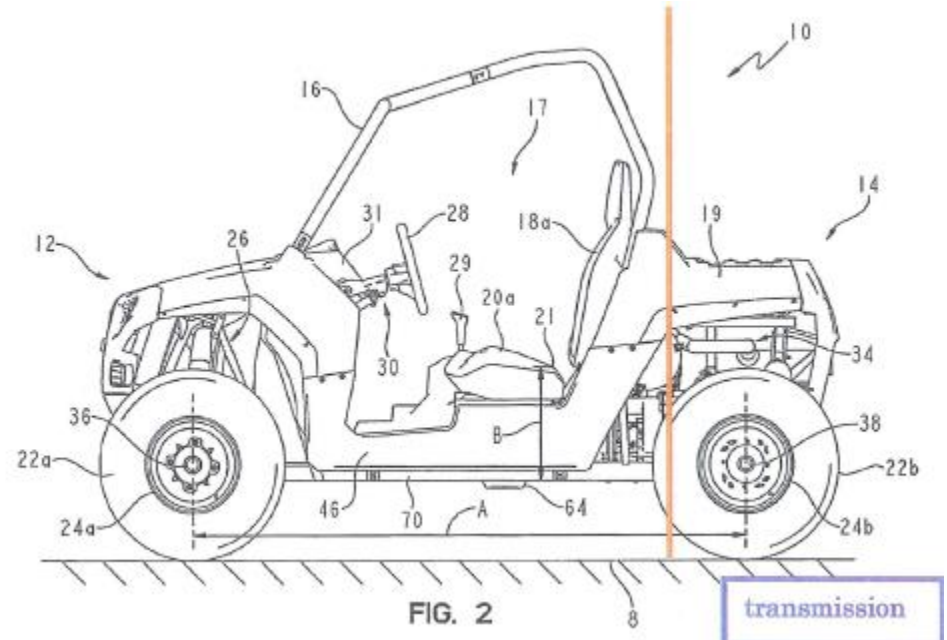


FIG. 2

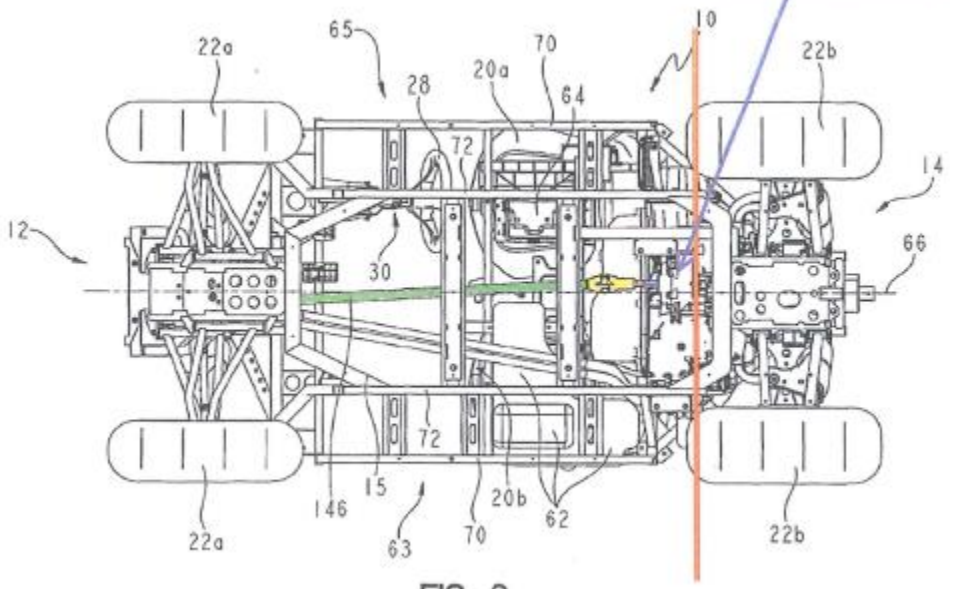


FIG. 9

(Pl.'s Resp. Mem. at 25-26.)[22] The asserted claims require the transmission to be located "completely rearward of the seating area," but as shown above, Defendants' construction would result in the transmission of the preferred embodiment being

[22] While the transmission is not specifically labelled on Figure 9, Plaintiff argues persuasively that the transmission is the component identified by the purple arrow because the blue output shaft, on which the parties agree, extends outward from the transmission. ('405 patent, col. 7, ll. 35-36.)

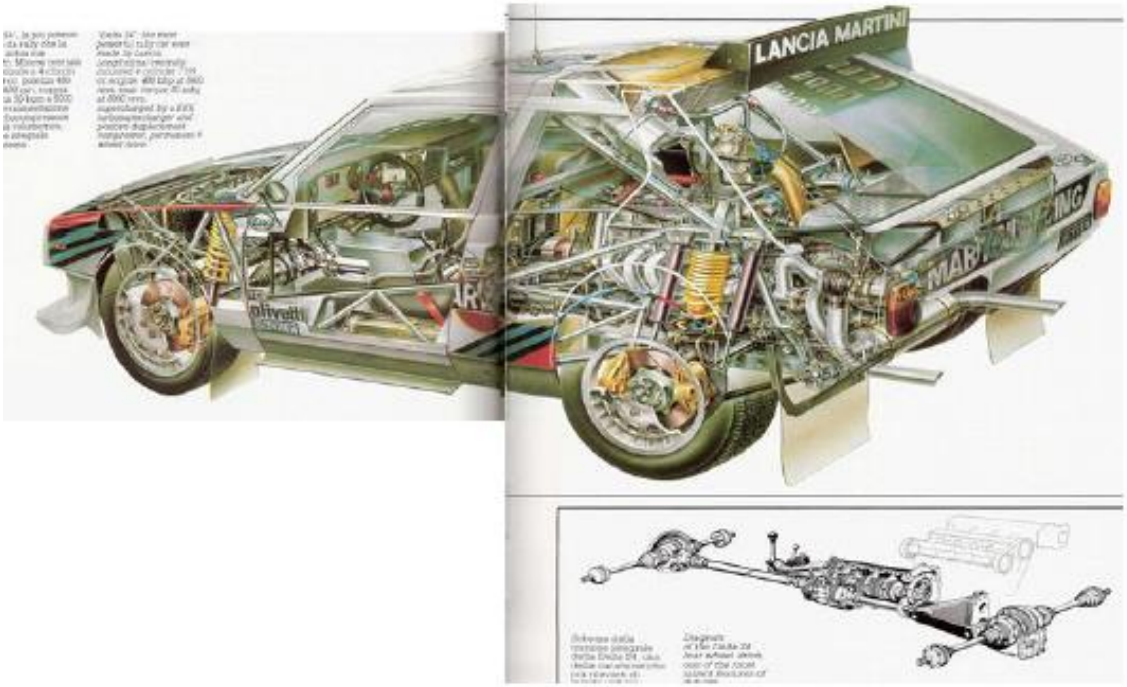
forward of Defendants' boundary. A proposed construction that reads out the preferred embodiment is "rarely, if ever, correct." *Vitronics*, 90 F.3d at 1583.

Plaintiff urges that if the term must be construed, the appropriate construction is "located behind the seats." At the heart of the dispute over Plaintiff's proposed construction is whether the "seating area" must be defined by a vertical line that runs through the rearwardmost point of any part of the seat assembly, or whether it is defined by the area actually intended to be occupied by the seated driver and passenger. The distinction becomes important if the seat back itself is not vertical (*see, e.g.*, Fig. 6 *supra*), but instead is tilted back to some degree, such that the transmission could be completely rearward of the seat *bottom* without being completely rearward of a vertical line running from the rearwardmost point of the seat as a whole. Defendants argue that for the transmissionto be "completely rearward" it cannot be located behind part of, yet underneath another part of, the tilted seats.

Both parties claim the prosecution history supports their respective constructions. In response to the examiner's finding that certain claims were anticipated by the Lancia Delta S4 prior art, Plaintiff distinguished its invention on the following basis:

> Claim 85 . . . recited that the transmission is completely rearward of the seating area. The Office Action states that this is taught by the Lancia vehicle, but does not provide any citation for such a teaching. Applicant specifically directs the Examiner's attention to pages 26-27 of Casucci. The lower picture on page 27 shows the drivetrain, including the transmission and the engine (in phantom). In this picture, it can be seen that the transmission is approximately as long as the engine, and located in front of the engine. The location of the gearshift relative to the transmission should also be noted. Referring then to the upper picture, it can be seen that the engine's forward edge is fairly close to the back of the seats. Given what we know about the size of the transmission from the lower picture, <u>it would seem impossible for</u>

the transmission to be completely rearward of the seats. Accordingly, applicant submits that Casucci is insufficient to reject claim 85.



(Pl.'s Resp. Mem. at 27 (emphasis by Plaintiff); Shewchuk Decl. Ex. 6 at 15 [Doc. No. 170-6]; Defs.' Opening Br. at 40.)[23]

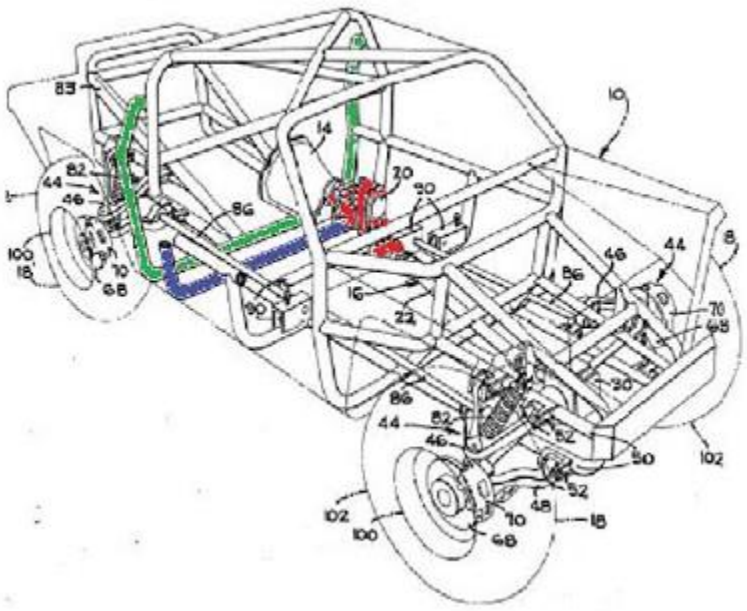
Defendants argue that when viewed from the side, the transmission of the Lancia Delta S4 extends forward underneath a portion of the cab area, and that therefore, in distinguishing it, Plaintiff must necessarily have adopted Defendants' construction of what was meant by "completely rearward of the seating area." (Defs.' Opening Br. at 41.) But the question is not whether the transmission in the reference extends underneath a portion of the *cab area*, but whether it extends underneath or stops short of the *seating area*, as Plaintiff would have the Court define that space. The answer to that question is not

[23] Neither Defendants nor Plaintiff stated clearly, by marking the illustration or otherwise, where exactly the transmission is located in the Lancia Delta S4.

sufficiently apparent from the discussion or the illustration of the Lancia Delta S4 for the Court to conclude Plaintiff intended by its distinction of that reference to adopt Defendants' "vertical line" construction.

The Court also considers Plaintiff's preliminary response to Arctic Cat, Inc.'s request for *inter partes* review of the '405 patent, which Defendants cite in support of their proposed "trailingmost extent" language. The cited excerpt reads:

> Further, Petitioner has no support for its alleged demarcation of the supposed **rearmost part** of the **seating area**. Petitioner and its expert merely assume that the additional frame member behind their blue one (which is highlighted in green below), to which the transmission is mounted, is not part of the mid-frame portion.



(Defs.' Resp. Br. at 20 (emphasis in briefing); Shewchuk Decl. Ex. 25 at 24 [Doc. No. 174-2].) But the gist of Plaintiff's statement in its response to the Arctic Cat IPR petition was that the seating area is not shown at all in the illustration, and therefore it is impossible to identify what is or is not the "rearmost part" of that area. This does not provide a basis to

conclude Plaintiff equated the "rearmost part of the seating area" with what Defendants now describe as the "trailingmost extent of the cab area."

On the other hand, Plaintiff's construction "located behind the seats" does not give full meaning to the term "*completely* rearward." A "construction that gives meaning to all the terms of the claim is preferred over one that does not do so." *Merck & Co.*, 395 F.3d at 1372. Plaintiff could have omitted the term "completely," and stated the transmission was simply "rearward," as it did in other locations in the specification. (*See, e.g.*, '405 patent, col. 8, ll. 41-42 ("Referring now to FIGS. 22-24 . . . Rear tubes 207 are positioned rearwardly of the front tubes 204. . .") It did not do so.

In sum, the Court finds nothing in the intrinsic or extrinsic evidence to suggest that the term "seating area" should be accorded anything other than its plain and ordinary meaning. There is no place in the specification where Plaintiff has acted as its own lexicographer, nor is there anything there or in the prosecution history from which the Court can discern that Plaintiff adopted a special set of boundaries for that space. Moreover, nothing in the extrinsic evidence submitted persuades the Court that the term "seating area" has some recognized meaning in the art that would be different from the understanding of ordinary jurors. Similarly, the Court finds no reason to accord the term "completely rearward" anything other than its plain and ordinary meaning. For these reasons, the Court recommends that the term "completely rearward of the seating area" be given its plain and ordinary meaning, and that no further construction is needed.

IV. Recommendation

Based on the files, records, and proceedings herein, and for the reasons stated above,

IT IS RECOMMENDED THAT the disputed claim terms and phrases be construed as set forth in this Report and Recommendation.

Dated: December 23, 2015

s/Hildy Bowbeer
HILDY BOWBEER
United States Magistrate Judge

NOTICE

Filing Objections: This Report and Recommendation is not an order or judgment of the District Court and is therefore, not appealable directly to the Eighth Circuit Court of Appeals.

Under Local Rule 72.2(b)(1), "a party may file and serve specific written objections to a magistrate judge's proposed finding and recommendations within 14 days after being served a copy" of the Report and Recommendation. A party may respond to those objections within 14 days after being served a copy of the objections. LR 72.2(b)(2). All objections and responses must comply with the word or line limits set forth in LR 72.2(c).

Under Advisement Date: This Report and Recommendation will be considered under advisement 14 days from the date of its filing. If timely objections are filed, this Report and Recommendation will be considered under advisement from the earlier of: (1) 14 days after the objections are filed; or (2) from the date a timely response is filed.